Occupational Health & Safety

Electrical Safety Advisory

Electrical Installations and Approvals

Objective:
This document is intended to provide Faculty and Staff with the basic electrical safety information to minimize the risk of a fire and/or personal harm while operating electrical equipment on campus.

Concern:
Installation concerns continue to be identified with electrical equipment and improper installations during the course of our internal inspection program. These concerns include:

- **Equipment which has been incorrectly wired, and which has not been inspected by the Electrical Safety Authority (ESA), representing either a shock or fire hazard**
- **Use of equipment which is not approved or certified as required by the ESA**
- **Frayed or damaged power cords**

  Where the exterior insulation has cracked, exposing the wires inside
- **Use of extension power cords which are inappropriately sized for the application. This is either based on the amperage rating requirements for the equipment, or the type of application**

  This can also be compounded by the use of non-CSA approved materials
- **Prolonged use of extension power cords in lieu of proper permanent electrical distribution connections**
- **Overloading of circuits**

  Ie. Plugging a power bar into another power bar for additional connections

  Note that this is not permitted on Campus

Required Electrical Safety Guidelines:
Each installation concern mentioned above is in direct violation of the Electrical Safety Code and represents potentially hazardous situations which may put you or fellow Western personnel in danger. Below are practices that we encouraged you to follow:

- **Be familiar with the electrical hazards associated within your workplace**
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Refer to the following link for a sample list of common appliances power usage;
https://www.burlingtonhydro.com/powertoconserve/residential/appliance-usage.html

Note that on a standard 15 Amp 120 Volt duplex receptacle, the maximum capacity is 1800 Watts (Ex. An electric kettle may require approximately 1500 Watts to operate)

If you are unsure of your requirements, contact Facilities Management

- Do not remove the prongs of an electrical plug. If plug prongs are missing, loose or bent, replace the entire plug

This includes using an adapter or extension power cord to circumvent a standard grounding device

The Facilities Management Electrical Shop, at your request, can assist with repairs, alterations, installation of receptacles, etc. that adhere to ESA standards and requirements for a nominal charge

- Only qualified persons should install cords on equipment.

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If you have any further concerns from a health and safety perspective, contact hsw@uwo.ca

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OH&S Committee & Staff
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