FS/HAAF GARRISON SAFETY OFFICE

Outsmart the Darkness: Your Weekly Safety Spotlight"

Electrical Cords/Plugs

Often overlooked, properly maintained electrical cords, plugs and outlets are crucial to employee workplace safety. Damaged or misused cords and plugs are a leading cause of workplace fires. Thankfully, many incidents and mishaps are preventable with a little knowledge and care.

Electricity Generates Heat. Heat Causes Fires.

Select Appropriate Electrical Cord

- Extension cords only approved for ***temporary*** use
- Select the appropriate length (too long presents trip/fall hazard, too short results in need to daisy chain)
  - ***Do not daisy chain electrical cords or surge protectors***
- Select the appropriate gauge for required amps (electrical current)
  - Undersized gauge will heat up over time, melting insulation and creating fire and electrical shock hazard

Inspect Electrical Cords

- Check for missing, frayed, cracked insulation
- Ensure prongs are not damaged or bent and that the ground prong is present
- Ensure electrical cords are not spliced together

More Outlets ≠ More Capacity

Avoid Overloading Circuits

- Plug only 1 high-wattage appliance into each receptacle
- High amperage draw appliances must be plugged directly into wall outlet
  - Microwave, coffee maker, space heater, refrigerator etc…
- Only plug 1 power strip or surge protector into a single duplex electrical outlet

Determine Capacity

- Electrical cords, power strips, and surge protectors have a limited capacity (Rated in Amps)
- Appliances require power (Measured in Watts)
- To calculate capacity (or requirement) multiply Amps x 125 Volts (Standard Power supplied by outlets in the US)
  - Surge Protector Rated at 15 Amps x 125 Volts= 1875 Watts/ .80 (to ensure use is less than 80% of capacity) = ***1500 Watts of Capacity***
  - Ensure that appliances plugged in do not exceed to avoid risk of overloading circuit and fire

Safe Use of Cords and Plugs

Proper Placement and Routing

- ***Don't*** run through doorways or windows without protection
- ***Don't*** run under carpets
- ***Don't*** staple or nail to walls or objects
- ***Don't*** run across walkways or doorways without trip protection
- ***Don't*** modify electrical cord or plug
- ***Do*** select the appropriate gauge and capacity cord or power strip
- ***Do*** inspect cords and outlets for damage prior to use
- ***Do*** only use extension cords temporarily