



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