

TOOL BOX TALKS

Electrical Cords, Extension Cords and GFCI

A wide array of power tools and equipment are used in the building. Small hand tools, fans and lighting are the most common, eventually graduating up to higher-voltage tools like welders as well.

Electrically powered tools are also exposed to wear and tear as well as damage. Tools and power cords that are worn during daily use can create potentially hazardous situations.

WORKSAFE TIPS

EXTENSION CORDS

- Remove cords when insulation is damaged
- Remove cords when ground prong is missing
- Remove extension cords from service after being run over by machinery / scissor lifts
- Remove cords damaged by knotting / twisting
- Use only Underwriters-Listed extension cords
- Never use polarized, light-duty, flat, two-wire extension cords on the construction jobsite
- Unplug & remove extension cords in water
- Never use Romax or metal clad wire as an extension cord
- Use extension cords with a GFCI device

MULTI-PLUG OUTLETS

- Never use a quad or duplex knockout box fitted to an extension cord
- Never use a low-capacity surge protector to power high-amperage tools
- Quad and duplex knockout boxes can create a hazard when knockout discs are removed through daily use, exposing conductors
- Knockouts bend inward, touching conductors resulting in an energized knockout box
- Remove cords fitted with knockout boxes
- Use manufactured UL-Listed multi-outlet boxes
- Remove multi-outlet boxes when outlet face is damaged

G.F.C.I. GROUND FAULT CIRCUIT INTERRUPTION

- Even 120V can cause fibrillation (heart failure)
- A GFCI shuts off power in a fraction of a second when a ground fault is detected
- A GFCI activates in 1/40 of a second
- A GFCI protects against the most common form of electrical shock – the ground fault
- GFCI protects against fire and overheating
- Use a GFCI with every extension cord
- Remove GFCI devices from service when damaged or malfunctioning
- Use GFCIs together with extension cords
- GFCIs are not part of the building's permanent wiring
- Use a GFCI with any 120 V extension cord

TOOL POWER CORDS

- Inspect electrical power tools before use
- Remove tools from service when ground connector is missing
- Electrical tape does not substitute as shielding
- Remove tools or cords that have been taped
- Remove tools from service when power cord insulation is damaged
- Remove from service when plug is damaged
- Taping cords with black electricians tape is not a substitute for proper repairs
- Never alter or modify powered hand tools
- Never alter or modify power tool cords
- Unplug tool before working on it
- Lock out or tag out electrical tools that are safety or maintenance concerns

