



## TOOL BOX TALKS



### ELECTRICAL SAFETY

Always use caution when working with electricity. Electrical hazards can cause burns, shocks, electrocutions, and also falls.

The following rules apply to electrical installations used on the jobsite, both temporary and permanent:

- All electric utilization equipment (including extension cords, portable and hand-held tools, and appliances) need to be approved by a nationally recognized testing laboratory (NRTL), such as by Underwriters Laboratories Inc. (UL).
- When using extension cords with portable electrical tools and appliances, always use three-wire types designed for hard or extra hard usage. Never file or bend the plug blades or cutoff the grounding pin (third prong) from cords.
- Keep electric cords and tools away from water. **DO NOT USE WHEN WET.**
- Do not lay electric cords or cables on floors, in walkways, etc., unless it is impractical to do otherwise. They should be suspended or secured in such a way as not to block or hang in walkways, doorways, or work areas.
- Temporary lights must be equipped with guards to prevent accidental contact with the bulb. A reflector constructed in such a way that the bulb is deeply recessed provides adequate guarding.
- Do not suspend temporary lights by their electric cords unless the cords and lights are designed for this means of suspension.
- Flexible cords should be used only in continuous lengths without splices or tap. When use, splices shall have insulation equal to that of the cord, such as moisture-proof heat-shrink type insulation sleeves.
- Energized panel boxes shall have the factory-supplied cover on them at all times, except for troubleshooting. When a cover is not in place, the area should be barricaded and marked "HOT" with a sign to indicate energized circuits.
- In general, extension cords, portable tools, appliances, and trouble lights should be plugged into Ground-Fault Circuit-Interrupter (GFCI) protected outlets. Explain to the employees which ground-fault protection method is being used: either by GFCI or by the Assured Equipment Grounding Conductor (AEGC) Program, which requires a written program and inspection, including before each use.



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### PORTABLE POWER TOOLS

In construction, portable power tools with defective wiring cause many injuries. The following safe practices are recommended:

- Use tools that display a label indicating that they have been approved by a nationally recognized testing laboratory (NRTL), such as by Underwriters Laboratories Inc. (UL).
- Use tools in accordance with manufacturers' recommendations.
- Use tools with three wire plugs and make sure connections are secure.
- Check tools, equipment, and cables for safe condition before first use, daily, and after any incident that can reasonably be suspected to have caused damage, such as being run over.
- Disconnect tools before making adjustments or repairs.
- When using power tools in a wet or damp area, use caution. The shock hazard is increased. Avoid standing in water. Build a platform with planks.

- In general, plug portable tools into Ground-Fault Circuit-Interrupter (GFCI) protected outlets or use a portable GFCI adapter.

### ELECTRICAL OUTLETS

- **Before using.** Make a safety check for loose cable connections, bare wires, cracked outlets, and missing or damaged faceplates. Repair or replace as necessary.
- **When using.** Be sure plug fits firmly and check for any signs of heating caused by faulty connections. Replace damaged parts
- **To remove cord – grab the plug body.** Yanking a cord from an outlet can: break cord insulation and wires, pull wires loose from connections, bend plug prongs, and spread the tension clips inside the outlet.



- **About the three-prong plug.**  
Guard it! It is your shock LIFEGUARD. Never cut off the third prong to fit an older two-hole outlet. Never use a two-wire extension cord. If you
  - must connect to a two-hole
  - outlet, use a portable GFCI adapter and a two-wire to three wire adapter. Be sure the pigtail is attached to the face plate screw.
- **Use Ground-Fault Circuit Interrupter (GFCI) protection.**  
In general, extension cords, portable tools, appliances, and trouble lights should be plugged into GFCI-protected outlets. Test GFCIs before each use.

