

Electrical Safety Or The Things You Did Wrong But Never Got Caught

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I have had the opportunity to visit many offices, and it is apparent that some folks are doing an excellent job of using good equipment on job sites; but office environments often do not comply with some of the basic electrical safety standards. I have noted the situations listed below in multiple locations. Do these sound familiar?

1. An electric heater attached to an 18 gauge extension cord. This could be the beginning of a fire, especially if the cord is running under a rug or chair pad.
2. Fixture and extension cords run through holes in the floor or walls without protection from abrasion.
3. Cords pinched in door jams.
4. Missing faceplates on receptacles and switches.
5. Open breaker slots in panels.
6. Access to breaker panels blocked by boxes of office supplies and/or other objects.
7. Device and junction boxes without covers.
8. Improper use of three-wire to two-wire adapters (“cheaters”).
9. Failure to comply with the bulb wattage recommendation on a lamp holder.
10. Connecting outlet strips in series.

This is only a partial listing. Failure to read the instructions that are provided with some of the energy saving bulbs could create problems. One sheet states *“This device is not intended for use with emergency exit fixtures or emergency lights. Not for use where exposed to the weather. Not for use in totally enclosed recessed fixtures.”* This type of situation is very similar to the problems encountered with the use of 100 watt bulbs in enclosed fixtures designed for 60 watt bulbs. Remember that the byproduct of electricity is heat. All approved electrical equipment has been tested by Underwriter’s Lab or another recognized lab and labeled in accordance with specific limitations. Misuse or abuse creates problems such as fire, electric shock, and possible citation if uncovered by a regulatory agency.

Electricity On a Jobsite

On October 1, 2003 Oregon O.H.S.A repealed 1926.404(b)(1), otherwise known as the Assured Equipment Grounding Conductor Program (AEGCP). That program was replaced with the requirement for ground fault circuit interrupters (GFCI) on all single phase circuits operating at 15, 20, and 30 amperes. Many contractors have continued to use an inspection policy to verify quarterly inspections. The code still refers to assured equipment grounding, but its application is for receptacles, cords, and tools operated at more than 125 volts, single phase, and 30 amperes. There has always been a separate code requirement for the user to do an inspection prior to each use; remind your employees to visually inspect all tools and cords before use.

Remember: Breakers protect equipment and GFCIs protect people.