



Common Incorrect Electrical Work



Electrical work is a complicated area and often things are done incorrectly. The following is a list of the top items improperly executed by contractors and homeowners.

1. **Using extension cords to replace permanent wiring methods**

2. **Over fusing of branch circuits**

A general rule of thumb is:

- 14 gauge copper wire = 15 amps
- 12 gauge copper wire = 20 amps
- 10 gauge copper wire = 30 amps

3. **Failure to ground receptacles and fixtures properly**

These items may still function but leave the homeowner with a false sense of security.

4. **Open slices - Not containing wiring in a suitable fire/arc safe enclosure**

This poses a great fire hazard

5. **Install grounding type receptacles on non-grounded household wiring**

Some examples of non-grounded wiring are knob and tube wiring and cloth covered romex

6. **Installing standard receptacles in locations requiring ground fault protection**

Some of these locations would include: within 6 feet of a kitchen or bar sink, outdoors, in garages, in bathrooms and in unfinished basement areas

7. **Installing improper wattage lamps in light fixtures**

This can not only damage your fixture but can damage the insulation on the building wiring and create a fire hazard.

8. **Installing ceiling fans to replace lighting fixtures on insufficiently supported ceiling box**

Most lighting fixture ceiling boxes installed must be fan rated

9. **The use of improper fittings on piping systems and wiring methods**

This can eliminate critical grounding on your circuit

10. **Speed wired or backstabbed receptacles**

Even though this practice is not a code violation, the connection to the receptacle many times is not as reliable as a hard wired (wrapped around the terminal) method

11. **Aluminum wiring - used in the 1960's and 1970's as a substitute for copper**

It does not mix well with copper and corrodes easily

12. **Installing compact fluorescent lamps to replace incandescent lamps on lighting fixtures switched by a dimmer**

This can severely damage the dimmer switch

13. **Recessed canned lighting installed next to insulation**

Can lead to safety issues and is a fire hazard