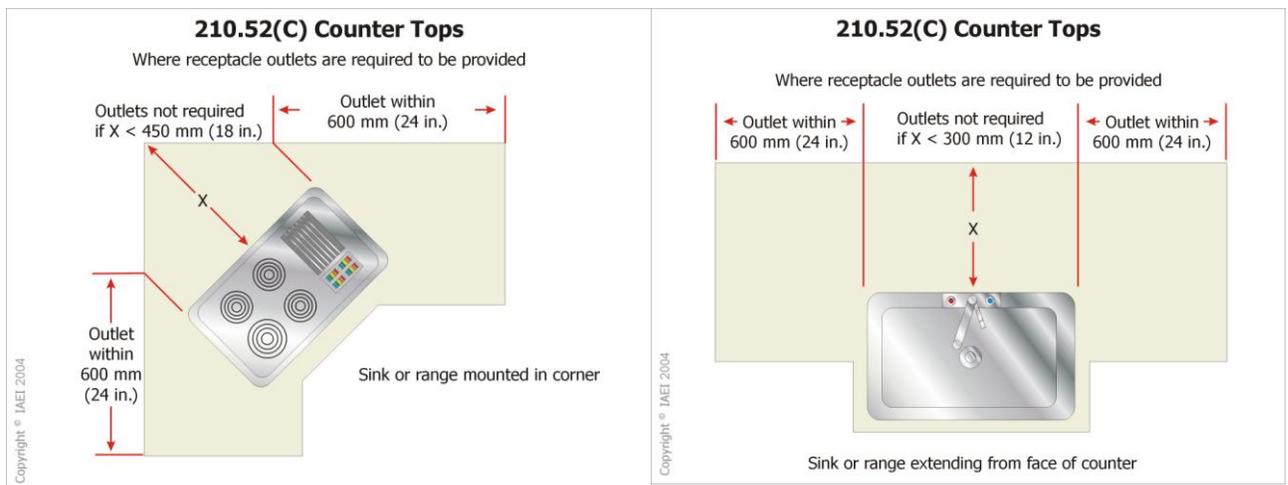


RESIDENTIAL ELECTRICAL REQUIREMENTS

July 2008

The following is only a partial list of the electrical code requirements. It is intended to help the homeowner with their wiring projects. The National Electrical Code should address specific questions.

1. All work shall be done in a neat and workmanlike manner.
2. In every kitchen, family room, dining room, living room, bedroom, recreation room, or similar room, receptacle outlets shall be installed within 6 ft. of any door or break in the wall, and then spaced no greater than 12 ft. apart in any continuous wall. Any wall 2 ft. or greater shall have a receptacle outlet.
3. Over kitchen counters a receptacle outlet shall be installed within 24 inches of the end of the counter, and then spaced no further than 48 inches apart over any continuous counter. Any counter space 12 inches or wider shall have a receptacle outlet installed over it. Any island or peninsular counter space wider than 12 inches and deeper than 24 inches shall have at least one receptacle outlet installed.



4. NM cable shall be stapled at intervals not exceeding 4½ ft. and within 12 inches of any cabinet, box, or fitting when a loom clamp is used. On single gang boxes without a clamp or connector, the NM cable shall be stapled within 8 inches of the box.
5. When NM cable is installed parallel to framing members, such as joist, rafters, or studs, the romex shall be installed and supported so that the nearest outside surface of the romex is not less than 1¼ inch from the nearest edge of the framing member.
6. NM cable connectors or loom clamps shall be used on all metal boxes.
7. Metal boxes shall be grounded using an approved ground screw or ground clip.
8. All splices and joints shall be made in a box. It is recommended that all joints be made-up before rough-in inspection. Junction boxes must remain accessible.
9. Fluorescent luminaires or recessed incandescent luminaires, with a completely enclosed lamp, installed in clothes closets shall be a minimum of 6 inches from shelf or storage area. Ceiling or wall mounted incandescent luminaires, with a completely enclosed lamp, shall be a minimum of 12 inches from shelf or storage area.

10. The NM cable sheath shall extend into the box no less than ¼ inch.
11. At least 6 inches of free conductor shall be left at each outlet, junction and switch point. The distance will be measured from the back of the box.
12. In walls or ceilings of noncombustible material, boxes shall be so installed that the front edge of the box will not set back of the finished surface more than ¼ inch. In walls and ceilings of combustible material, boxes shall be flush with the finished surface or project therefrom.
13. Unused openings in boxes shall be effectively closed to afford protection equivalent to that of the wall of the box.
14. Recessed incandescent luminaries shall have thermal protection. Insulation shall not be installed within 3 inches of the recessed luminaries enclosure, wiring compartment, or ballast, and shall not be installed above the luminaries so as to entrap heat, unless the luminaries is identified as being suitable for insulation to be in direct contact with the fixture.
15. All 125-volt, single phase, 15 and 20 ampere receptacles installed in bathrooms, within 6 feet of the outside edge of any laundry, utility or wet bar sink, garages, outdoors, accessory buildings at dwellings and in unfinished basements shall have ground-fault circuit-interrupter (GFCI) protection for personal. No exceptions. All 125-volt, single phase, 20 ampere receptacles in the kitchen that serve countertop surfaces shall have ground-fault circuit-interrupter (GFCI) protection for personal. See National Electrical Code for GFCI requirements relating to hydromassage bathtubs, hot tubs and swimming pools.
16. At least one wall receptacle shall be installed in bathrooms within 3' of basin edge on adjacent wall. Bathroom receptacles shall be supplied by at least one 20-ampere branch circuit, and shall have no other outlets. This circuit may supply more than one bathroom. Where a 20-ampere circuit supplies only one bathroom, the light and fan maybe installed on the same circuit as the receptacle outlet.
17. Ranges and dryers shall be a 4- wire receptacle outlet.
18. All switches, including dimmer switches shall be grounded.
19. Where the white conductor of NM cable is used as a switch loop, the white conductor shall be re-identified to indicate that the conductor is not being used as a neutral.
20. Cover plates, blank covers, and panel covers shall be installed before final inspection is made.
21. All multi-wire branch circuits shall have 2-pole breakers.
22. Intersystem bonding terminal shall be installed at meter base of service disconnect.
23. Conductors installed in raceways above or below ground shall be listed for wet location.
24. SER cable shall be installed using 60⁰ ampacity as listed in Table 310-16.
25. Receptacles installed in damp or wet locations shall be weather resistant.
26. All 15- or 20-ampere, 125-volt receptacles are to be tamper resistant.
27. Dedicated circuit required for hydromassage bathtubs.
28. All luminaries are to be listed by NRTL.

Please call for inspections listed on inspection card. (612-8269)