

MINIMUM RESIDENTIAL ELECTRICAL REQUIRMENTS

The City of La Porte currently utilizes the 2008 National Electrical Code. Existing local amendments remain in effect. This guide is not intended to cover all residential electrical requirements. Refer to the National Electrical Code for complete residential electrical requirements.

SERVICE ENTRANCE:

Minimum 100 amp disconnecting means as per 2008 NEC, Art. 230-79(c)

Sec. 82-340. Residential capacity and branch circuits

- (a) All services for 1 & 2 family dwellings, shall be a minimum of 100 amp capacity and shall have a minimum of two (2) spare breaker slots.
- (b) All underground services shall be installed in a minimum of Schedule 40 Conduit.

SERVICE EQUIPMENT – DISCONNECTING MEANS:

Location of the service disconnecting means shall be readily accessible in accordance with 2008 NEC, Art. 230-70.

BACK STAB OR QUICK STAB

Effective March 10, 2007, all electrical devices (including but not limited to outlets and switches) shall be installed with the screw-wrap or approved screw clamp installation. Back or quick stab installation is prohibited.

BRANCH CIRCUITS

General Lighting Circuits:

General lighting loads in single-family residences shall be divided into not less than three (3) circuits and shall be balanced as nearly as possible. Circuits may be of either 15 or 20 amp capacity or may be mixed.

20 Amp Maximum 10 outlets and/or lights per circuit as per City's Code of Ordinances, Sect. 82-347

15 Amp Maximum 8 outlets and/or lights per circuit as per City Code of Ordinances, Sect. 82-347

#12 Minimum wire size for branch circuit as per City Code of Ordinances, Sect. 82-342

Receptacle locations –

- (A) To be located so that no “point” in any wall space is more than six-feet (6') from a receptacle. Wall spaces two-feet (2') or more in width shall include receptacles. See the 2008 NEC, Art. 210-52.
- (B) Spacing of countertop receptacles may not exceed 4'.
- (C) Any countertop 1' or larger shall have an outlet.
- (D) An outlet must be within 24" of any end of countertop.

Small appliance – As required by the 2008 NEC, Art. 210-52(b), a minimum of 2 circuits of 20 amp capacity for all receptacle outlets shall be required for the small appliance loads.

Ground-Fault Circuit- Interrupter (GFCI) – As per 2008 NEC, Art. 210-8, all 125-volt, single-phase 15 and 20 amp receptacles serving bathrooms, kitchens, exterior receptacles (readily accessible from grade), garage receptacles not designated for appliances and grade-level portions of unfinished accessory buildings used for storage or work areas shall have GFCI protection.

Arc-Fault Circuit Interrupter Protection - All 120-volt, single phase, 15 and 20 ampere branch circuits supplying outlets installed in dwelling unit bedrooms shall be protected by a listed arc-fault circuit interrupter, combination type installed to provide protection of the branch circuit. Branch/feeder AFCI's shall be permitted to be used to meet the requirements of 210.12(B).

Bathrooms and toilet rooms shall have an operable window with a minimum of 3 sq. ft. or exhaust fan vented directly outside.

Dishwasher and Garbage Disposals – Require individual 20 amp circuits serving no other appliance(s) or receptacle(s).

Washing Machine – As per 2008 NEC, Art. 220-10{c}(2) a 20 amp circuit shall supply the laundry and serve no other outlets.

Air Conditioning & Electric Heat – One circuit per unit that is sized by demand (Minimum #12 wire size) as per the City's Code of Ordinances, Section 82-341. Also, GFI outlet and a service disconnect required.

Aluminum Wire – The use is prohibited as per the City's Code of Ordinances, Section 82-338.

Smoke Detector - In hallways leading to bedrooms, smoke detectors must be located at or before the first bedroom in the hallway either centrally located on the ceiling, or on the wall no more than 12" below the ceiling and in each sleeping room. (110v with battery back-up and in series.)

In two-story dwellings a smoke detector must be located centrally at the top of the stairway landing and a smoke detector in each bedroom.