

VILLAGE OF THORNTON ELECTRICAL CODE

Sec. 7-1B-1. - Electrical code adopted.

The rules and regulations of the National Electrical Code (NFPA 70), 2020 Edition, are hereby adopted and incorporated by reference as the safe and practical standards for the installation, alteration and use of electrical equipment in the Village. We also adopt the Commonwealth Edison Company, rules and regulations for the safe and practical standards for the installation, alteration and use of electrical equipment with the following amendments and clarifications:

Residential Buildings, but not limited to:

1. Each residential unit shall be provided with a minimum of 100 ampere service with provision for 24 sub circuits with a minimum of 12 working circuits. Circuit breaker panel shall have a minimum 100 ampere main breaker with 24 branch circuits. The use of mini breakers is not allowed, unless approved by special permission.
2. An approved type light fixture shall be installed over the sump or ejector pumps, heating unit, air conditioning unit or similar unit at their locations.
3. A weatherproof GFCI receptacle with bubble cover shall be provided on the front and rear of each single-family, two-family and multiple-family buildings.
4. Light fixtures with wall switches shall be installed in kitchens, dining rooms, bathrooms, powder rooms, halls, closets and other applicable areas where there is more than one entrance to the rooms and halls indicated light fixtures shall be multiple-switch controlled at both entrances. Each bedroom shall be provided with a ceiling or wall light fixture, wall switch controlled, or switch all receptacles with one-half of the receptacles alive at all times.
5. A light fixture shall be installed to illuminate properly all basement stairs and such fixture shall be switch-controlled from the head of the stairs. Multiple switch controls shall be installed at both elevations when the basement is provided with other exit doorways.
6. Bathroom and powder rooms shall have a GFCI receptacle and shall be installed as near as possible to the mirror on a dedicated 20 amp, circuit.
7. All toilet rooms must have an exhaust fan switched with the light or separately.
8. All existing receptacles must pass proper tension tolerances.
9. Any painted over receptacles must be replaced.
10. All receptacles must have a proper ground termination.
11. All ceiling boxes in bedrooms, kitchens, and living areas where ceiling may be installed must have the proper bar hanger and box approved for ceiling fan installations.
12. Enclosed light fixtures shall be installed in areas where the light bulb could be damaged, (such as closets or low head room areas).
13. All smoke and carbon monoxide detectors shall be 120v with battery backup and interconnected (so if one sounds they all sound). Where conditions prohibit hard wiring, wireless units may be approved with special permission.
14. All low voltage wiring (cable, telephone, data, doorbell and thermostat) must be independently supported and protected from mechanical damage.
15. Kitchens shall have a minimum of two 20 amp appliance circuits and separate circuits for each dishwasher, refrigerator and garbage disposal.

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Wiring Specifications:

1. All wiring shall be copper of the proper ampere rating and insulation for the circuit its serving. Aluminum wire will not be permitted within any building.

Conduit/Raceways:

2. All wiring shall be installed in rigid conduit, electrical metallic tubing, or surface metal raceways. Where flexible connections are required greenfield or seal tight are permissible in lengths not to exceed six feet.
3. The use of armored flexible cable (BX) is prohibited on all work. All types of BX including but not limited to: FMT, SE, MC, MS, MNC, NM, FCC, FC and AC. All exposed BX must be removed and replaced with conduit.
4. Ridged nonmetallic (schedule 40PVC) conduit may be used for outside underground wiring only.
5. No PVC conduit shall be used above grade level, unless it is encased in concrete.

Commercial Main Disconnects and Panels:

1. There shall be only one main disconnect on any buildings or improvements to be used for commercial purposes.
2. All panels shall be commercial grade panel boards with bolt-in breakers.
3. All wiring devices shall be commercial grade.
4. All connectors and couplers shall be steel set screw or compression

Registered Electrical Contractor Required:

1. All electrical work coming under the scope of this chapter shall be performed or installed only by a qualified electrical contractor who is registered in the Village as an electrical contractor.
2. Nothing herein contained shall prohibit the owner occupant of a single-family residence from planning, installing, altering or repairing the electrical system of such principal residence, provided that such electrical work shall comply with the minimum standards for electrical systems contained in the National Electric Code and local amendments adopted by this Village, and shall be subject to inspection by the Village Electrical Inspector, and such owner occupant shall not employ an electrical contractor to assist him or her.
3. All Photovoltaic System installations shall be installed by a "Qualified Person" as defined in Illinois Administrative Code Title 83, Part 468, Section 468.20.