

Electrical requirements for moved buildings or structures

Except for energy code compliance, buildings or structures that are moved into or within a jurisdiction are treated as new buildings per Minnesota Rules Chapter 1300.0220, Subp. 4.

The existing wiring in a moved building is not automatically required to be removed and replaced with new wiring. If the existing wiring is in good condition and there is no evidence of damage, disrepair or overloaded circuitry, the existing wiring may be acceptable.

A moved building must comply with the current National Electrical Code (NEC) to the extent practicable with respect to the following, including but not limited to:

- Minimum 100-ampere service as required by NEC section 230.79.
- Emergency Disconnect as required by NEC section 230.70, 225.41
- Surge-Protective Device as required by NEC section 230.67, 215.18
- Electrical service grounding and bonding as required by NEC Article 250
- Electrical grounding of feeder to dwelling (if applicable) as required by NEC Article 250.32
- Electrical service grounding electrode system as required by NEC section 250.50
- Ground-fault circuit-interrupter [GFCI] protection as required by NEC section 210.8
- Arc-fault circuit-interrupter (AFCI) protection as required by NEC section 210.12
- Minimum quantity and amperage of branch circuits as required by NEC section 210.11
- Minimum quantity of receptacle outlets and lighting outlets indoors and outdoors as required by 210.52 and 210.70
- Existing receptacle outlets that are not supplied with an equipment grounding conductor (2-prong receptacle outlets) shall be replaced with grounding type receptacle outlets that are grounded via an equipment grounding conductor or
- Existing receptacle outlets that are not supplied with an equipment grounding conductor shall be replaced with GFCI receptacle outlets as required by NEC Article 406.12
- GFCI receptacles cannot be used as replacements for 2-prong receptacle outlets where equipment is specifically required to be grounded by the NEC sections 250.112 and 250.114
- Tamper-resistant receptacles (TR) as required by NEC section 406.26
- Weather-resistant receptacles (WR) as required by NEC section 406.9
- Smoke alarms and carbon monoxide detectors as required by MN Rules 1309.0314 and 1309.0315

This is not an all-inclusive list; other requirements apply depending on conditions in the field

A significant concern with older wiring is the temperature rating of the insulation on the conductors; older branch circuit wiring most likely has a lower temperature rating of 75°C or 60°C (°C = degrees centigrade).

New luminaires (light fixtures) are generally required to be connected to 90°C branch circuit supply wiring. The supply conductor insulation temperature rating requirements for new luminaires is often marked on the packaging, in the installation instructions, and on the luminaire itself. The wiring at the lighting outlet needs to be replaced with 90°C supply wiring if required by the fixture manufacturer.

The department strongly recommends that all parties involved in a moved building project meet with the electrical inspector and building inspector if applicable at the beginning of the project so that everyone has a clear understanding of what is required or allowed.

It's unlikely that a moved building can meet every code requirement. Installations that can be readily accomplished in a new building - such as the exact spacing or location of receptacle outlets - may not be practicable in an older building. Some issues may require the electrical inspector to make a judgement call in the field.

Unless special permission has otherwise been granted by the authority having jurisdiction (AHJ), all critical fire and life safety issues related to the electrical system must be in compliance.