

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 26 - Installation of electrical equipment

Rule 26-600 Location of panelboards

Concerns were expressed with the requirement for mounting panelboards in dwelling units with no overcurrent device being more than 1.7 m above finished floor level. This could create a situation where the non-metallic-sheathed branch circuit cables may come within the 1.5m from the floor described in Rule 12-518.

The rationale for Rule 26-600 is for panelboards to be located in areas where they will not be subject to damage and be readily accessible. The rationale for Rule 12-518 is to protect cables from mechanical damage when they come within 1.5m of the floor unless protected by location. Given that panelboards are installed in an area not subject to damage, then the non-metallic-sheathed cable entering the panelboard would meet the intent of Rule 12-518, not requiring additional mechanical protection.

Rule 26-656 Arc fault protection of branch circuits for dwelling units

1. Rule 26-656(1)(a)(ii) provides an exemption from AFCI protection for refrigerators in kitchens. Concerns have been expressed regarding the refrigerator AFCI exemption not applying to freezers. Insight can be obtained from the Rationale and Intent in the CE Code Handbook for another residential branch circuit rule:

CE Code Handbook Rule 26-652

Item a) requires that a separate branch circuit for every refrigerator be installed in the kitchen. Some refrigerators draw a relatively high current, and plugging in another appliance on the same circuit can cause the overcurrent device to open. If this goes unnoticed, there is no electrical hazard, but the food in the refrigerator can spoil.

Since the reason we exempt refrigerators from AFCI protection is to prevent any possible nuisance tripping and the associated food spoilage, we can also apply the same exemption to freezers.

2. As a result of the Covid 19 Pandemic, there has been reported a widespread shortage of AFCI breakers. In order to deal with this temporary shortage and prevent unnecessary building occupancy delays, the following options are recommended:
 - a. Explore the option of using AFCI receptacles or Blank Face AFCI receptacles instead of breakers;

Unless stated otherwise, all Code references in this STANDATA are to the Canadian Electrical Code, Part I, 2018.

Issue of this STANDATA is authorized by
the Provincial Electrical Administrator

[Original Signed]

Clarence C. Cormier, P.Eng.

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- b. Install regular breakers (non-afci) and then arrange for a re-inspection by the Local AHJ once the AFCI breakers have become available and are installed;
- c. Install regular breakers (non-afci) and then arrange with the Local AHJ for a Verification of Compliance (VOC) process. Once the AFCI breakers have become available and are installed, complete, sign, and return the VOC. The Local AHJ may choose to audit some or all of these installations once they have received the signed VOC.

Rule 26-706 Tamper-resistant receptacles

Receptacles in child care facilities

A childcare facility is a facility that requires a license under the Alberta Child Care Licensing Act & Regulations.

Rule 26-724 Receptacles for dwelling units

Safety codes officers have raised concerns about the possibility of damage to non-metallic sheathed cable feeding receptacles in island counters not permanently fixed to the building structure.

Some building contractors are designing island counters so that they may be easily moved to different locations in a kitchen. A movable island counter is not a “**fixed island counter**” and therefore does not require a receptacle as outlined in Rule 26-724 d) iv). Island counters are deemed to be “**fixed**” when secured to the structure with nails, screws or equivalent method.

Electrical contractors should consult with the building contractor to determine if the kitchen island counter is movable or fixed, and should only install receptacles in fixed island counters.

Disclaimer:

The information in this bulletin is not intended to provide professional design advice. If professional expertise is required with respect to a specific issue or circumstance, the services of a professional should be sought.

