

BULLETIN 2002-009-EL

Revised September 14, 2016

Arc-Fault Protection - Rule 26-724(f) and (g) of the Canadian Electrical Code, Part I (CE Code)

The intent of this bulletin is to clarify application of arc-fault protection requirement mandated by CE Code Rule 26-724(f) and (g).

In conformance with CE Code Rule 26-724(f), each branch circuit supplying 125 V receptacles rated 20 A or less must be protected by a combination-type arc-fault circuit interrupter with the exceptions of Rule 26-724(f)(i) and (ii). Notwithstanding Rule 26-724(f), Rule 26-724(g) permits the use of an outlet branch-circuit-type arc-fault circuit interrupter in lieu of the combination-type arc-fault circuit interrupter provided the requirements of Rule 26-724(g)(i) and (ii) are met. CE Code Rule 32-110(a)(ii) does not permit smoke alarms and carbon monoxide alarms to be installed where the circuit is protected by a ground fault circuit interrupter or arc-fault circuit interrupter. Articles 3.2.4.21. and 9.10.19.3. of Division B of the Vancouver Building By-law require smoke alarms provided with battery as an alternative power source to be installed in hallways serving bedrooms and in each sleeping room of dwelling unit.

It is intended that the arc-fault protection requirements apply to branch circuits inside the dwelling units including the single occupancy rooms, studios or bachelor suites and in the apartment type hotels or motel suites equipped with the kitchenette units. It is not intended to apply these requirements to branch circuits inside hotel or motel rooms or suites where such rooms or suites are not provided with kitchenettes.

It is not intended to apply these requirements for existing branch circuit in the existing dwelling units where the receptacles are being replaced or added to the existing branch circuit. However, it is intended by these requirements to provide the arc-fault protection for all new branch circuits installed in the existing dwelling units for the purpose of Rule 26-724(f) and (g).

CE Code Rules 26-714 and 26-726 contain receptacles and branch circuits requirements for single dwellings, it is not intended that the arc-fault protection requirements apply to branch circuits supplying receptacles installed outside a single dwelling (i.e. outdoor, in the garage or carport).

A new Rule 32-110(e) that will be used in the 2018 CE Code has been approved by the Canadian Electrical Code Part I Committee. This rule permits smoke alarm or a combination of a smoke alarm and carbon monoxide alarm equipped with back up battery power to be connected to a GFCI or AFCI protected circuit. When a deviation from Rule 32-110(a)(ii) of the 2015 CE Code is warranted, smoke alarm or a combination of a smoke alarm and carbon monoxide alarm equipped with back up battery power can be connected to a GFCI or AFCI protected circuit provided a request for a Special Permission is made in accordance with Bulletin 2009-004-EL.

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