



Dwellings

NEC 210.12(A) of the 2020 National Electrical Code (NEC) requires Arc-Fault Circuit Interrupter (AFCI) protection for **branch circuits** supplying all newly installed 120-volt, 15 & 20 amp outlets or devices in kitchens, laundry areas, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas of a dwelling. **The AFCI shall be installed in a readily accessible area.** Some examples of these “outlets” include, but are not limited to, receptacles, luminaires (light fixtures), smoke detectors, dishwashers, and disposals. This article also requires extensions and modifications to a branch circuit, in these areas, to be arc fault protected.

St. Paul will enforce this as follows:

1. All new or extended branch circuit wiring in dwellings will be required to have AFCI protection where required in NEC 210.12.
2. New branch circuit wiring in existing areas of a dwellings will also need AFCI protection for new outlets if required by NEC 210.12.
3. Existing outlets are not required to be AFCI protected, but may optionally be AFCI protected.

Dormitories

AFCI protection is required per 210.12 (B) & (D) in dormitory units for new, extended, or modified branch circuits supplying 120V, 15 & 20 amp outlets and devices in the following areas: Bedrooms, living rooms, hallways, closets, and bathrooms.

Guest Rooms, Guest Suites, and Patient Sleeping Rooms in Nursing Homes and Limited-Care Facilities.

AFCI protection is required per 210.12 (C) & (D) in guest rooms and guest suites in hotels and motels, and patient sleeping rooms in nursing homes and limited-care facilities, for new, extended, or modified branch circuits supplying newly installed 120V, 15 & 20 amp outlets and devices.

AFCI Protection - Receptacle Replacement

NEC 406.4 (D)(4) of the 2017 NEC requires replacement receptacles in dwelling units, dormitory units, guest rooms and guest suites, and patient sleeping rooms in nursing homes and limited-care facilities, to be AFCI protected as stated in areas listed in 210.12(A),(B), and (C). There are also additional requirements in NEC 406.4(D) for GFCI, tamper-resistant protection, and/or weather-resistant protection with receptacle replacement. Please refer to this code section for additional requirements. AFCI protection for replacement receptacles can be accomplished by one of the following:

- (1) A listed outlet branch circuit type arc-fault circuit-interrupter receptacle.
- (2) A receptacle protected by a listed outlet branch circuit type arc-fault circuit-interrupter type receptacle.
- (3) A receptacle protected by a listed combination type arc-fault circuit-interrupter type circuit breaker.
- (4) Replacement of a 2-prong ungrounded receptacle can be accomplished with a combination AFCI/GFCI type receptacle.

Note: Please see Article 210.12 and/or Article 406.4 and other pertinent sections of the 2020 National Electrical Code for further information on this and other requirements. We do not have copies available, check online resources, your local library, or electrical supply store.