

## CITY OF SAINT PAUL

DEPARTMENT OF SAFETY AND INSPECTIONS 375 JACKSON STREET, SUITE 220 ST. PAUL, MINNESOTA 55101-1806 Phone: 651-266-8989 Fax: 651-266-9124

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# **AFCI Protection Requirements**

### **Dwellings**

NEC 210.12(A) of the 2017 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. 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 and Guest Suites (New 2017 NEC)**

AFCI protection is required in guest rooms and guest suites in hotels and motels for 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 and dormitory units in the areas stated in 210.12 to be AFCI protected. 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 2017 National Electrical Code for further information on this and other requirements. We do not have copies available, check with your local library or electrical supply house.

Revised: 06/2017