



AFCI and GFCI Requirements

State-by-State Data

NFPA 70, National Electrical Code (NEC), first required arc-fault circuit interrupters (AFCIs) in the 1999 edition. The 2005 edition required combination AFCIs, which respond to both parallel and series arcs, for all electrical circuits that supply outlets in bedrooms of new homes. The 2008 edition of the NEC further expanded the use of combination AFCIs beyond bedroom circuits to other areas of the home, such as the family room, dining room, living room, closets and hallways. The 2014 edition added kitchens and laundry areas to that list.

AFCIs have been on the market since about the year 2000. They differ from ground-fault circuit interrupters (GFCIs), which were introduced into the NEC in the 1960s, by protecting branch circuit wiring from arcing faults instead of protecting people from shock if parts of an electric appliance or tool become energized due to a ground fault.

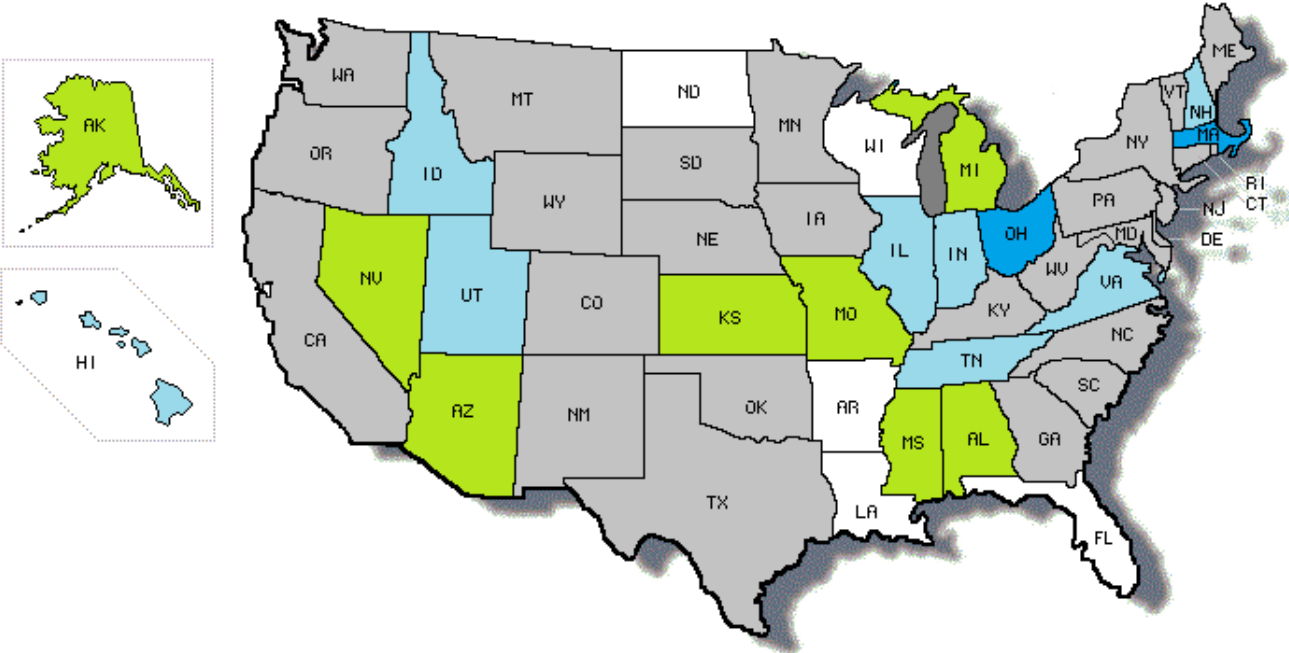
The maps and tables on the following pages detail the status of AFCI and, to a lesser extent, GFCI requirements in each state. The table includes hyperlinks to state building code agencies as well as relevant documents.

If you have questions or comments about the information in this table, please contact [Dan Buuck](#) at 202-266-8366.

AFCI Provisions in Effect

By National Electrical Code Edition*

2017	2014	2011	2008/2005/2002	No Statewide Adoption of AFCI Provisions
Total: 2	Total: 27	Total: 5	Total: 8	Total: 8
Ohio Massachusetts	California Colorado Connecticut Delaware Georgia Iowa Kentucky Maine Maryland Minnesota Montana Nebraska New Jersey New Mexico New York North Carolina Oklahoma Oregon Pennsylvania Rhode Island South Carolina South Dakota Texas Vermont Washington West Virginia Wyoming	Arkansas Florida Louisiana North Dakota Wisconsin	Hawaii (2008) Idaho (2005) Illinois (2008) Indiana (2002) New Hampshire (2008) Tennessee (2005) Utah (2008) Virginia (2005)	Alabama Alaska Arizona Kansas Michigan Mississippi Missouri Nevada

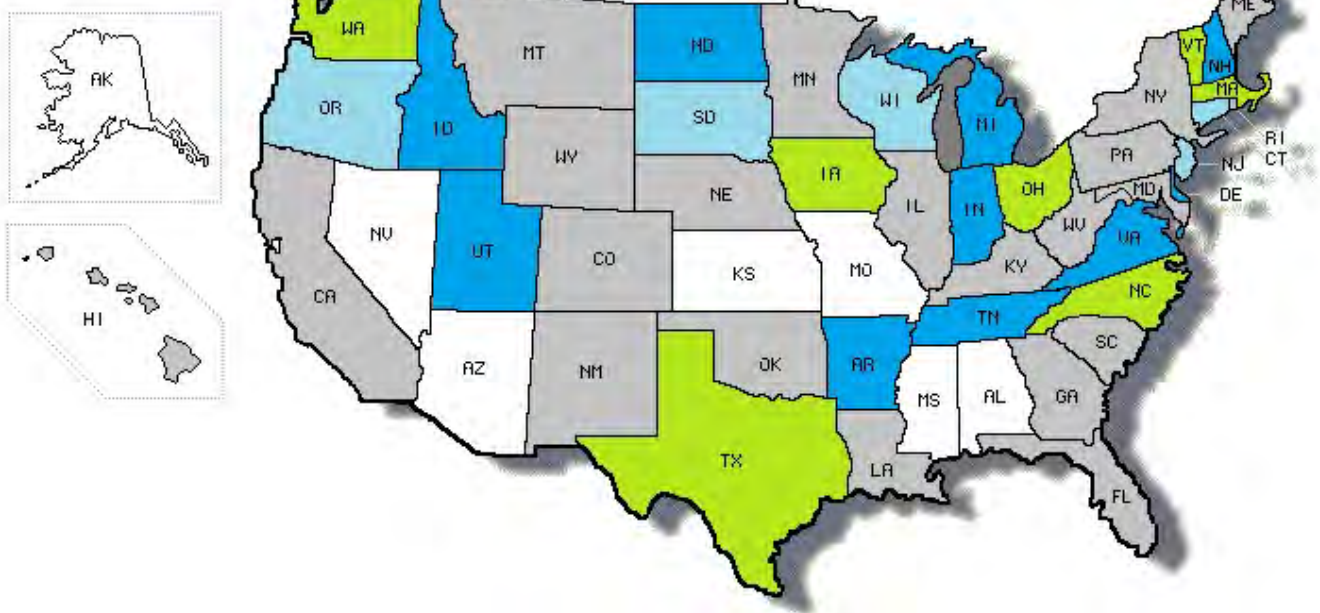


* Where the AFCI provisions were amended to reflect the requirements in an earlier or later edition, the state was included in that edition's column.

Amendments to AFCI and GFCI Provisions

No Amendments to AFCI or GFCI Provisions	Amendments to <u>AFCI</u> Provisions	Amendments to Both <u>AFCI</u> And <u>GFCI</u> Provisions	Amendments to <u>GFCI</u> Provisions	No Statewide Adoption of Residential Electrical Code
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Total: 21 California Colorado Florida Georgia Hawaii Illinois Kentucky Louisiana Maine Maryland Massachusetts Minnesota Montana Nebraska New Mexico New York Oklahoma Pennsylvania Rhode Island South Carolina West Virginia Wyoming	Total: 10 Arkansas Delaware Idaho Indiana Michigan New Hampshire North Dakota Tennessee Utah Virginia	Total: 5 Connecticut New Jersey Oregon South Dakota Wisconsin	Total: 7 Iowa North Carolina Ohio Texas Vermont Washington	Total: 7 Alabama Alaska Arizona Kansas Mississippi Missouri Nevada
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State	Residential Electrical Code Adopted and Effective Date	Technical Amendments (AFCI/GFCI/X)	State Agency	Documents	Notes
	IRC International Residential Code—Electrical Section NEC National Electrical Code	X Amendments do not include AFCI or GFCI provisions.			
Alabama	No Statewide Adoption		Building Commission		Only state projects are required to be completed under the 2014 NEC (effective 7/1/2016).
Alaska	No Statewide Adoption		Div. of Labor Standards and Safety	Adoption	"Public structures" and any place of employment are required to be completed under the 2011 NEC (effective 10/16/2012). ("Public structures" are buildings such as hotels, resident housing with more than one rental unit, restaurants, taverns, lodging houses, children's homes, auditoriums, town halls, or any structure designed or used for public assembly, whether publicly or privately financed.)
Arizona	No Statewide Adoption				
Arkansas	2014 NEC Effective 11/24/2014	AFCI	Department of Labor	Amendments	The 2014 NEC was adopted with an amendment which removes the requirement for arc-fault circuit-interrupters (AFCIs) in kitchens and laundry rooms.
California	2014 NEC Effective 1/1/2017		Building Standards Commission	Adoption	
Colorado	2014 NEC Effective 7/1/2014		Electrical Board	Adoption	
Connecticut	2012 IRC Effective 10/1/2016	AFCI/GFCI	Office of the State Building Inspector	Amendments	AFCI protection requirements were expanded to include kitchens and laundry areas. Exceptions were added for GFCI receptacles in garages and accessory buildings. The permit applicant shall state which code will be followed at the time of permit application.

State	Residential Electrical Code Adopted and Effective Date	Technical Amendments (AFCI/GFCI/X)	State Agency	Documents	Notes
Delaware	2014 NEC Effective 3/11/2016	AFCI	Fire Prevention Commission	Amendments (See p. 29)	The 2014 NEC was adopted in its entirety with the exception of two amendments regarding the installation of smoke alarms on branch circuits protected by Arc-Fault Circuit-Interruption.
District of Columbia	2011 NEC Effective 3/28/2014	X	Dept. of Consumer and Regulatory Affairs	Amendments	The 2011 NEC was adopted with one technical amendment which deals with switchboards and panelboards.
Florida	2012 IRC Effective 7/1/2015		Building Commission	Adoption Adopted Code	
Georgia	2014 NEC Effective 1/1/2015		Dept. of Community Affairs	Adoption	
Hawaii	2008 NEC Effective 4/16/2010		Building Code Council	Adoption	
Idaho	2014 NEC Effective 7/1/2014	AFCI	Division of Building Safety	Amendments	The 2014 NEC was adopted with amendments that limit AFCIs to branch circuits supplying outlets in bedrooms.
Illinois	2008 NEC Effective 7/1/2011		Capital Development Board	Adoption	Building codes, including the electrical code, may be adopted at the local level. All new construction must comply with the 2008 or later edition of the NEC for those jurisdictions which have not adopted a code locally.
Indiana	2003 IRC Effective 9/11/2005	AFCI	Fire Prevention & Building Safety Commission	IRC Adoption	
Iowa	2014 NEC Effective 1/1/2015	GFCI	Building Code Bureau	Amendments	The AFCI provisions for extending or modifying a branch circuit were deleted, but those for new construction were not amended. Exceptions were added for GFCI protection in garages, accessory buildings and unfinished basements.
Kansas	No Statewide Adoption		Office of the State Fire Marshal		2008 NEC was adopted by the state for state-owned buildings only.

State	Residential Electrical Code Adopted and Effective Date	Technical Amendments (AFCI/GFCI/X)	State Agency	Documents	Notes
Kentucky	2014 NEC Effective 8/2/2013		Dept. of Housing, Buildings and Construction	Adoption (See p. 98)	
Louisiana	2011 NEC Effective 1/1/2013		State Uniform Construction Code Council	Amendments	
Maine	2014 NEC Effective 7/1/2014	X	Bureau of Building Codes & Standards	Amendments	The 2014 NEC was adopted with eight technical amendments. However, there are no amendments to the AFCI or GFCI sections.
Maryland	2014 NEC Effective 1/1/2016		Codes Administration	Adoption	For the applicable electrical requirements, refer to the local electrical code and the National Electrical Code as adopted and enforced by the State Fire Marshal, authorized fire officials, or building.
Massachusetts	2017 NEC Effective 1/1/2017	X	Board of Building Regulations and Standards	Amendments	The 2017 NEC was adopted with multiple amendments which do not affect AFCI or GFCI requirements.
Michigan	2015 IRC Effective 2/8/2016	AFCI	LARA Building Division	Amendments	AFCI protection requirements have been completely removed from the IRC.
Minnesota	2014 NEC Effective 7/1/2014		Construction Codes and Licensing Division	Adoption	
Mississippi	No Statewide Adoption		State Fire Marshal		Local jurisdictions shall adopt one of the last three editions of the IRC.
Missouri	No Statewide Adoption				
Montana	2014 NEC Effective 10/24/2014	X	State Electrical Board	Adoption	Cities and counties are not permitted to amend the NEC as adopted by the State.
Nebraska	2014 NEC Effective 4/9/2014		State Electrical Division	Adoption	

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Nevada	No Statewide Adoption		State Fire Marshal		
New Hampshire	2011 NEC Effective 7/1/2011	AFCI	State Building Code Review Board	Adoption Amendment	An amendment was approved by the Building Code Review Board on 1/15/2016 which allows AFCI protection to be removed on a branch circuit serving a medical device that has caused repeated tripping of the AFCI.
New Jersey	2014 NEC Effective 4/4/2016	AFCI/GFCI	Dept. of Community Affairs	Amendments	The 2014 NEC was adopted with two exceptions as to where GFCI protection is required: for receptacles that are not readily accessible and for receptacles dedicated for a specific appliance that is not easily moved. The requirement for GFCI protection in laundry areas was deleted. The requirement for AFCI protection in kitchens and laundry areas, as well as for branch circuit extensions or modifications, was deleted. Replaced receptacles also do not need to provide AFCI protection.
New Mexico	2014 NEC Effective 8/1/2014	X	Construction Industries Division	Amendments	The amendments do not include any changes to the AFCI and GFCI protection requirements.
New York	2015 IRC Effective 10/3/2016		Code Enforcement & Administration	Adoption	The 2015 IRC was adopted without electrical amendments. Jurisdictions may adopt more restrictive local standards.
North Carolina	2014 NEC Effective 4/1/2016	GFCI	Office of State Fire Marshal	Amendments	The 2014 NEC was amended to exempt GFCI protection for a single outlet receptacle specifically for use by a sewage lift pump.
North Dakota	2014 NEC Effective 9/1/2014	AFCI	State Electrical Board	Amendments	The 2014 NEC was amended to allow for Section 210.12 to revert back to the 2011 NEC language which does not require AFCI protection for kitchens and laundry areas.

State	Residential Electrical Code Adopted and Effective Date	Technical Amendments (AFCI/GFCI/X)	State Agency	Documents	Notes
Ohio	2009 IRC Effective 1/1/2016	AFCI/GFCI	Board of Building Standards	Amendments	The electrical section of the 2009 IRC was amended to add exemptions for GFCI protection: A single outlet receptacle serving a garage door opener is exempted as is a single receptacle for a sump pump when a GFCI protected outlet is within 6 feet of the pump. AFCI provisions are added to match those in the 2017 Edition of the NEC, except that an exception is added for branch circuits supplying receptacles which only serve the kitchen counter space.
Oklahoma	2015 IRC Effective 11/2/2015	X	Uniform Building Code Commission	Amendments	The electrical amendments do not include any changes to the AFCI and GFCI protection requirements.
Oregon	2014 NEC Effective 10/1/2014	AFCI/GFCI	Building Codes Division	Amendments Statewide Code Interpretation Adopted Code	AFCI protection is not required on GFCI protected receptacles in dining rooms, for optional, dedicated outlets supplying equipment known to cause unwanted tripping of AFCI devices (see Statewide Code Interpretation link to the left), or on branch circuits supplying receptacles or appliances fastened in place located in hallways, kitchens and laundry areas. AFCI protection is also not required for extensions or modifications of existing circuits or when replacing or upgrading a service or panelboard. Exceptions for GFCI protection include permanently installed fire and burglar alarm systems, single receptacles for appliances that are not easily moved, single receptacles for sewage or sump pumps. Note that receptacles need to be labeled "not GFCI protected." Cities and counties are not permitted to amend the NEC as adopted by the State.
Pennsylvania	2015 IRC Effective 12/31/2015		UCC Review and Advisory Council		

State	Residential Electrical Code Adopted and Effective Date	Technical Amendments (AFCI/GFCI/X)	State Agency	Documents	Notes
Rhode Island	2014 NEC Effective 8/1/2014	X	Building Code Commission	Amendments	The 2014 NEC was adopted with several technical amendments which do not include modifications to AFCI or GFCI protection.
South Carolina	2015 IRC Effective 7/1/2016	X	Building Code Council	Amendments	The 2015 IRC was adopted with one technical amendment to the electrical section which does not affect AFCI or GFCI protection.
South Dakota	2014 NEC Effective 5/28/2014	AFCI/GFCI	Electrical Commission	Amendments	The 2014 NEC was adopted with several technical amendments, one of which exempts life support equipment from AFCI and GFCI protection.
Tennessee	2008 NEC Effective 1/28/2009	AFCI	State Fire Marshal	Amendments	AFCI protection requirements were amended to include only bedrooms.
Texas	2014 NEC Effective 1/1/2014	GFCI	Dept. of Licensing and Regulation	Adoption	The Texas Occupations Code § 1305.201 provides municipalities the authority to make local amendments to the 2014 NEC.
Utah	2015 IRC Effective 7/1/2016	AFCI	Uniform Building Code Commission	Adoption Amendments	AFCI protection requirements are amended to include only kitchens and bedrooms. AFCI protection is also not required for extensions of existing circuits or an outlet which does not significantly increase the existing electrical load—not including changes which are part of a remodel or addition. Codes are adopted by the Utah legislature, with the Building Code Commission holding making recommendations.
Vermont	2014 NEC Effective 7/1/2014	GFCI	Building Code and Safety Services	Amendments	Amendments limit GFCI protection in laundry areas to those receptacles installed within 6 feet of a washing machine or sink.
Virginia	2012 IRC Effective 7/14/2014	AFCI	Dept. of Housing and Community Development	Adopted Code	The 2012 IRC was amended to limit the AFCI protection requirement to bedrooms.

State	Residential Electrical Code Adopted and Effective Date	Technical Amendments (AFCI/GFCI/X)	State Agency	Documents	Notes
Washington	2014 NEC Effective 7/1/2014	GFCI	Dept. of Labor & Industries	Amendments	GFCI protection is not required for a fire alarm system in a garage or unfinished basement. The receptacle and cover plate must be red and labeled. All fixed electrical equipment with exposed grounded metal parts within an enclosed shower area or within five feet of a bathtub must have GFCI protection. For GFCI protection, a kitchen is defined as any area where utensils, dishes, etc. are cleaned or where food or beverages are prepared or cooked. Cities might have separate electrical ordinances but must be at least as stringent as the State.
West Virginia	2015 IRC Effective 8/1/2016		Office of the State Fire Marshal	Adoption	
Wisconsin	2011 NEC Effective 12/1/2013	AFCI/GFCI	Dept. of Safety and Professional Services	Amendments	AFCI protection is not required on branch circuit wiring when it is extended or modified, and GFCI protection is not required on a single receptacle for a sump or sewage pump when a GFCI receptacle is within 3 feet of the non-GFCI receptacle.
Wyoming	2014 NEC Effective 7/1/2014		Dept. of Fire Prevention and Electrical Safety		Local jurisdictions may amend the electrical code.