



NECA 169-2010

Standard for

Arc-Fault Circuit Interrupters (AFCIs) and Ground-Fault Circuit Interrupters (GFCIs)

AN AMERICAN NATIONAL STANDARD



Published by
National Electrical Contractors Association

NECA 169-2010

Standard for Installing and Maintaining
**Arc-Fault Circuit Interrupters
(AFCIs) and Ground-Fault
Circuit Interrupters (GFCIs)**

**An American
National Standard**



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(This foreword is not a part of the standard)

Foreword

National Electrical Installation Standards™ are intended to improve communication among specifiers, purchasers, and suppliers of electrical construction services. They define a minimum baseline of quality and workmanship for installing electrical products and systems. *NEIS™* are intended to be referenced in contract documents for electrical construction projects. The following language is recommended:

Arc-Fault Circuit Interrupters (AFCIs) and Ground-Fault Circuit Interrupters (GFCIs) should be installed and maintained in accordance with NECA 169-2010, *Standard for Installing and Maintaining Arc-Fault Circuit Interrupters (AFCIs) and Ground-Fault Circuit Interrupters (GFCIs)* (ANSI).

Use of *NEIS* is voluntary, and the National Electrical Contractors Association assumes no obligation or liability to users of this publication. Existence of a standard shall not preclude any member or non-member of NECA from specifying or using alternate construction methods permitted by applicable regulations.

This publication is intended to comply with the edition of the National Electrical Code (NEC) in effect at the time of publication. Because they are quality standards, *NEIS* may in some instances go beyond the minimum requirements of the NEC. It is the responsibility of users of this publication to comply with state and local electrical codes when installing electrical products and systems.

Suggestions for revisions and improvements to this standard are welcome. They should be addressed to:

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1. Scope

This standard describes the installation and maintenance procedures for Arc-Fault Circuit Interrupters (AFCIs) and Ground-Fault Circuit Interrupters (GFCIs).

1.1 Applications Included

This standard covers the installation and maintenance of Arc-Fault Circuit Interrupters, AFCIs, and Ground-Fault Circuit Interrupters, GFCIs, permanently installed on building premises wiring systems for residential, commercial, and industrial applications. It applies to:

- a) Combination Type AFCIs for new installations
- b) Branch/Feeder Type AFCIs only for replacement purposes in existing installations
- c) GFCIs for new or existing installations

1.2 Applications Excluded

This standard does not cover older designs of GFCIs, or GFCIs designed to be temporarily connected to premise wiring systems. It does not apply to:

- a) Temporary installations
- b) Portable or cord AFCIs and GFCIs
- c) AFCIs and GFCIs required in mobile homes, manufactured homes, or mobile home parks
- d) AFCIs required in cord-and-plug connected air conditioning units

1.3 Regulatory and Other Requirements

- a) All information in this publication is intended to conform to the National Electrical Code® (ANSI/NFPA Standard 70). Installers should always follow the NEC®, applicable state and local codes, and manufacturer's instructions when installing and maintaining AFCIs and GFCIs.
- b) Only qualified persons familiar with the construction and operation of AFCIs and GFCIs should perform the work described in this publication. All work should be performed in accordance with NFPA 70E, *Standard for Electrical Safety in the Workplace*.
- c) General requirements for installing electrical products and systems are described in NECA 1-2006, *Standard Practices for Good Workmanship in Electrical Construction* (ANSI). Other *National Electrical Installation Standards* provide additional guidance for installing particular types of electrical products and systems. A complete list of *NEIS* is provided in Annex B.