NFPA 70A

National Electrical Code® Requirements for One- and Two-Family Dwellings

2005 Edition

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An International Codes and Standards Organization

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NFPA 70A

National Electrical Code® Requirements for One- and Two-Family Dwellings

2005 Edition

Excerpted from the 2005 *National Electrical Code*® NFPA 70–2005

Preface

This 2005 edition of NFPA 70A is a compilation of electrical provisions for one- and two-family dwellings. The provisions assembled in this compilation have been extracted directly from the 2005 edition of NFPA 70, *National Electrical Code*® (*NEC*®), and have been editorially revised only where necessary to limit their application to one- and two-family dwellings. This compilation has been reviewed and approved by the National Electrical Code Committee through its Technical Correlating Committee. It is being provided for the convenience of inspectors, contractors, builders, and others who are primarily interested in only those *NEC* rules that apply to one- and two-family dwellings.

Only those wiring methods and materials commonly encountered in new construction at one- and two-family dwellings are included in NFPA 70A. In like manner, only current ratings up to and including 400 amperes (based on Table 310.15(B)(6)) and voltages up to and including 600 volts are covered in NFPA 70A. It is the intent that the rules covering wiring methods, any materials, or any type of equipment, such as motors, not specifically included in this document are to be covered by the applicable rules in the 2005 edition of the *National Electrical Code.*

Where a reference is made to an article or section not included in NFPA 70A, such as to Article 430 or 430.52, the reference is to that article or section as it appears in the 2005 edition of the *National Electrical Code.*

The numbering system for articles and sections of the 2005 edition of the *National Electrical Code* has been preserved in NFPA 70A, so that provisions in NFPA 70A bear the same numerical designation as they have in the *NEC.* The user of NFPA 70A should be aware, therefore, that there are gaps in the numerical sequence of provisions in NFPA 70A, and that these gaps are a natural consequence of the fact that NFPA 70A contains only selected provisions of the *NEC.*

This edition of NFPA 70A has been reviewed by the *NEC* Technical Correlating Committee, and the committee has determined, by way of an affirmative letter ballot, that the extracting and editorial revision of *NEC* text included in NFPA 70A has been achieved without altering the technical intent of the 2005 edition of the *National Electrical Code.*

As the 2005 edition of the *National Electrical Code* is the parent document for the extracted text contained in NFPA 70A, any request for a formal interpretation of any text in NFPA 70A will be processed in accordance with the NFPA Regulations Governing Committee Projects as a formal interpretation of the 2005 edition of the *National Electrical Code.*

Prior to this 2005 edition, the most recent previous edition of NFPA 70A was the 2002 edition.

NATIONAL ELECTRICAL CODE COMMITTEE

This list represents the membership at the time the Technical Correlating Committee was balloted on the final text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the back of this book.

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(Member Emeritus)
D. Harold Ware, Libra Electric Company, OK [IM]
(Member Emeritus)

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2005 Edition

Throughout this document the term "this Code" refers to the compilation of requirements for electrical installations in one- and two-family dwelling units contained therein that have been extracted from NFPA 70-2005, National Electrical Code® (NEC®).

ARTICLE 90
Introduction

90.1 Purpose.

(A) Practical Safeguarding. The purpose of the *NEC* is the practical safeguarding of persons and property from hazards arising from the use of electricity.

(B) Adequacy. This *Code* contains provisions that are considered necessary for safety. Compliance therewith and proper maintenance results in an installation that is essentially free from hazard but not necessarily efficient, convenient, or adequate for good service or future expansion of electrical use.

FPN: Hazards often occur because of overloading of wiring systems by methods or usage not in conformity with this *Code*. This occurs because initial wiring did not provide for increases in the use of electricity. An initial adequate installation and reasonable provisions for system changes provide for future increases in the use of electricity.

(C) Intention. This *Code* is not intended as a design specification or an instruction manual for untrained persons.

(D) Relation to Other International Standards. The requirements in this *Code* address the fundamental principles of protection for safety contained in Section 131 of International Electrotechnical Commission Standard 60364-1, Electrical Installations of Buildings.

FPN: IEC 60364-1, Section 131, contains fundamental principles of protection for safety that encompass protection against electric shock, protection against thermal effects, protection against overcurrent, protection against fault currents, and protection against overvoltage. All of these potential hazards are addressed by the requirements in this *Code*.

90.2 Scope.

(A) Covered. This *Code* covers only those wiring methods and materials most commonly encountered in new construction at one- and two-family dwellings.

(B) Not Covered.

(1) This *Code* does not contain all of the rules necessary to cover mobile homes and manufactured homes, recreational vehicles, park trailers, floating dwelling units, buildings containing more than two dwelling units or buildings used for other than dwelling purposes. For those installations, the 2005 *National Electrical Code* (NFPA 70-2005) shall apply.

(5) This *Code* does not cover installations under the exclusive control of an electric utility where such installations
   a. Consist of service drops or service laterals, and associated metering, or
   b. Are located in legally established easements, rights-of-way, or by other agreements either designated by or recognized by public service commissions, utility commissions, or other regulatory agencies having jurisdiction for such installations, or
   c. Are on property owned or leased by the electric utility for the purpose of communications, metering, generation, control, transformation, transmission, or distribution of electric energy.

FPN to (5): Examples of utilities may include those entities that are typically designated or recognized by governmental law or regulation by public service/utility commissions and that install, operate, and maintain electric supply (such as generation, transmission, or distribution systems) or communication systems (such as telephone, CATV, Internet, satellite, or data services). Utilities may be subject to compliance with codes and standards covering their regulated activities as adopted under governmental law or regulation. Additional information can be found through consultation with the appropriate governmental bodies, such as state regulatory commissions, Federal Energy Regulatory Commission, and Federal Communications Commission.

(C) Special Permission. The authority having jurisdiction for enforcing this *Code* may grant exception for the installation of conductors and equipment that are not under the exclusive control of the electric utilities and are used to connect the electric utility supply system to the service-entrance conductors of the premises served, provided such installations are outside a building or terminate immediately inside a building wall.

90.3 Code Arrangement. This *Code* is divided into the introduction and nine chapters, as shown in Figure 90.3.