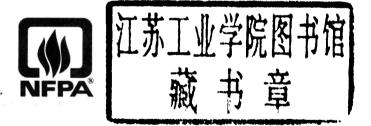
National Fire Codes^a 1985

National Fire Codes®

A Compilation of NFPA Codes, Standards,

Page 2014 December 2015 A Codes, Standards, Manuals and Guides

Volume 7



Protection Association. The complete set contains the codes, standards, recommended practices, manuals and guides developed by the technical committees of the Association and processed in accordance with the NFPA Regulations Governing Committee Projects.

National Fire Protection Association Batterymarch Park, Quincy, MA 02269

NATIONAL FIRE PROTECTION ASSOCIATION

Batterymarch Park, Quincy, MA 02269

The National Fire Protection Association was organized in 1896 to promote the science and improve the methods of fire protection and prevention, to obtain and circulate information on these subjects and to secure the cooperation of its members in establishing proper safeguards against loss of life and property by fire. The Association is an international, charitable, technical and educational organization. Its membership includes over one hundred and fifty national and regional societies and associations and over thirty-two thousand individuals, corporations, and organizations. Anyone interested may become a member; membership information is available on request.

Library of Congress Catalog Card No. 38-27236

Volume 7 — ISBN: 0-87765-010-1

Complete Set — ISBN: 0-87765-140-X

ISSN: 0077-4545

Copyright © 1985

National Fire Protection Association

All Rights Reserved

Licensing Provision

This document is copyrighted by the National Fire Protection Association (NFPA). Public authorities and others are urged to reference this document in laws, ordinances, regulations and administrative orders or similar instruments. Any deletions, additions and changes desired by the adopting authority must be noted separately. Those using this method ("adoption by reference") are requested to notify the NFPA (attention: Secretary, Standards Council) in writing of such use.

The term "adoption by reference" means the citing of the title and publishing information only. For permission to print and to publish any individual document contained in this publication, see the copyright statement in the pamphlet edition of that document or contact NFPA.

(For further explanation, see the Policy Concerning Adoption, Printing and Publication of NFPA Documents which is available upon request from the NFPA.)

Printed in U.S.A.

Published in Quincy, Massachusetts

National Fire Codes

The National Fire Codes are annual compilations of the Codes, Standards, Recommended Practices, Manuals, Guides and Model Laws prepared by Technical Committees organized under NFPA sponsorship in accordance with the published procedures of the Association. Only those documents which have been adopted by the Association are included in the National Fire Codes.

The Board of Directors of the Association appoints persons from those vitally interested, qualified, and active in the areas with which the Committees are concerned so as to achieve a fair balance of affected interests. All service on these NFPA Technical Committees is contributed voluntarily in support of the Association's program for firesafety. While these procedures assure the highest degree of care, neither the National Fire Protection Association, its members, nor those participating in its activities accept any liability resulting from compliance with the provisions given herein, for any restrictions imposed on materials or processes, or for the completeness of the text. Users should realize that complete reliance for firesafety can never rest exclusively on any single safeguard.

The committees responsible for the various texts published herein are given in the introductory sections preceding each. Current committee lists are published in the NFPA Yearbook, which may be obtained from the Association. Official records of the adoption of each standard will be found in the NFPA Technical Committee Reports, the Technical Committee Documentation and Fire Journal, a bimonthly membership publication of the Association.

Volumes 1 through 6 contain documents which have been judged suitable for legal adoption and enforcement (Codes and Standards).

Volumes 7 and 8 contain Recommended Practices, Manuals and Guides which are generally referred to as good engineering practices. Also included in these volumes are such documents as model laws and enabling acts which will be found to be particularly helpful to enforcing agencies.

Many of the documents have been approved by the American National Standards Institute as American National Standards. Most of the documents contained in these volumes are also published by the Association in separate pamphlet form.

Users of this document should consult applicable Federal, State and local laws and regulations. NFPA does not, by the publication of this document, intend to urge action which is not in compliance with applicable laws and this document may not be construed as doing so.

Policy adopted by NFPA Board of Directors on December 3, 1982

The Board of Directors reaffirms that the National Fire Protection Association recognizes that the toxicity of the products of combustion is an important factor in the loss of life from fire. NFPA has dealt with that subject in its technical committee documents for many years.

There is a concern that the growing use of synthetic materials may produce more or additional toxic products of combustion in a fire environment. The Board has, therefore, asked all NFPA technical committees to review the documents for which they are responsible to be sure that the documents respond to this current concern. To assist the committees in meeting this request, the Board has appointed an advisory committee to provide specific guidance to the technical committees on questions relating to assessing the hazards of the products of combustion.

Official NFPA Definitions

Extracted from the Regulations Governing Committee Projects

Section 2. Terms and Definitions.

2-2 Definitions. Where the following terms, commonly found in the Association Committee Documents, are used or defined in the body of the text of a Standard, Code, Recommended Practice, Manual or Guide, they shall be consistent with the intent of these meanings, but these "definitions" may be altered by a Committee to fit the individual needs of the Document. Such altered definition shall be clear and unambiguous in the context in which it is used.

Approved: means "acceptable to the authority having jurisdiction."

NOTE: The National Fire Protection Association does not approve, inspect or certify any installations, procedures, equipment or materials; nor does it approve or evaluate testing laboratories. In determining the acceptability of installations or procedures, equipment or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization concerned with product evaluations which is in a position to determine compliance with appropriate standards for the current production of listed items.

Authority Having Jurisdiction: The "authority having jurisdiction" is the organization, office, or individual responsible for "approving" equipment, an installation, or a procedure.

NOTE: The phrase "authority having jurisdiction" is used in NFPA Documents in a broad manner since jurisdictions and "approval" agencies vary as do their responsibilities. Where public safety is primary, the "authority having jurisdiction" may be a federal, state, local, or other regional department or individual such as a fire chief, fire marshal, chief of a fire prevention bureau, labor department, health department, building official, electrical inspector, or others having statutory authority. For insurance purposes, an insurance inspection department rating bureau, or other insurance company representative may be the "authority having jurisdiction." In many circumstances, the property owner or his designated agent assumes the role of the "authority having jurisdiction"; at government installations, the commanding officer or departmental official may be the "authority having jurisdiction."

Code: A Document containing only mandatory provisions using the word "shall" to indicate requirements and in a form generally suitable for adoption into law. Ex-

planatory material may be included only in the form of "fine print" notes, in footnotes, or in an appendix.

Labeled: Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

Listed: Equipment or materials included in a list published by an organization acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

NOTE: The means for identifying listed equipment may vary for each organization concerned with product evaluation, some of which do not recognize equipment as listed unless it is also labeled. The authority having jurisdiction should utilize the system employed by the listing organization to identify a listed product.

Manual or Guide: A Document, which is informative in nature and does not contain requirements.

Recommended Practice: A Document containing only advisory provisions (using the word "should" to indicate recommendations) in the body of the text.

Shall: Indicates a mandatory requirement.

Should: Indicates a recommendation or that which is advised but not required.

Standard: A Document containing only mandatory provisions using the word "shall" to indicate requirements. Explanatory material may be included only in the form of "fine print" notes, in footnotes, or in an appendix.

Notes and footnotes are informatory only and are not mandatory.

NOTICE

All questions or other communications relating to documents in this volume should be sent only to NFPA Headquarters, addressed to the attention of the Committee responsible for the document.

For information on obtaining Formal Interpretations of the documents, proposing Tentative Interim Amendments, proposing amendments for Committee consideration, and on matters relating to the content of the document, write to the Secretary, Standards Council, National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

A statement, written or oral, that is not processed in accordance with Section 16 of the Regulations Governing Committee Projects shall not be considered the official position of NFPA or any of its Committees and shall not be considered to be, nor be relied upon as, a Formal Interpretation.

VOLUME 7

Table of Contents

Titles	Pages
Fire Prevention Code	. 1-1
Portable Fire Extinguishers, Model Enabling Act	. 10L-1
Sprinkler Systems, Care and Maintenance of	. 13A-1
Fire Department Operations in Properties Protected by Sprinkler and Standpipe Systems	. 13E -1
Closed-Head Foam-Water Sprinkler Systems, Installation of	16A-1
Steam Fire Pumps, Operation and Maintenance of National Standard	. 21-1
Supervision of Valves Controlling Water Supplies for Fire Protection	. 26-1
Private Fire Brigades, Organization, Training and Equipment	. 27-1
Fire Flow Testing and Marking of Hydrants	. 291 -1
Flammable Liquids, Gases and Volatile Solids, Fire Hazard Properties of	. 325M -1
Flammable and Combustible Liquids and Gases in Manholes and Sewers, Control of	. 328-1
Flammable and Combustible Liquids, Underground Leakage of	. 329-1
Storage of Forest Products	. 46-1
Hazardous Chemicals Data	. 49-1
Hazardous Chemical Reactions, Manual of	491M-1
Class 1 Hazardous Locations for Electrical Installations in Chemical Plants, Classification of	497 - 1
Gases, Vapors and Dusts for Electrical Equipment in Hazardous (Classified) Locations, Classification of	. 497M - 1
Fire Hazards in Oxygen-Enriched Atmospheres	53M - 1
Explosion Venting, Guide for	68 -1
Electrical Equipment Maintenance	70B -1
Model State Electrical Law	70L -1
Notification Appliances for Protective Signaling Systems, Installation, Maintenance and Use of	72G -1
Testing Procedures for Protective Signaling Systems	79H-1

© 1982 NFPA, All Rights Reserved

Fire Prevention Code

NFPA 1-1982

1982 Edition of NFPA 1

This edition of NFPA 1, Fire Prevention Code, was prepared by the Technical Committee on Fire Prevention Code and acted on by the National Fire Protection Association, Inc. on May 19, 1982, at its Annual Meeting in San Francisco, California. It was issued by the Standards Council on June 8, 1982 with an effective date of June 28, 1982, and supersedes all previous editions.

Origin and Development of NFPA 1

This Code was originally developed as a result of the request of many members of the National Fire Protection Association who expressed a need for a document covering all aspects of fire protection and prevention which utilized the other developed NFPA standards and codes. NFPA Staff initiated this work in 1971 upon the directive from the NFPA Board of Directors.

This Code in conjunction with the other NFPA codes and standards is intended to provide local jurisdictions with a guideline for the development of a local fire prevention code. Prerogatives of local officials are excluded from the main text of the document but included within appendices as guidance for exercising desired prerogatives.

The National Fire Protection Association wishes to publicly thank the many individuals who have participated in the development of this Code and particularly the members of the Fire Prevention Code Committee.

Technical Committee on Fire Prevention Code

Howard Boyd, Chairman Nashville, TN Rep. Fire Marshals Assn. of North America

Stanley E. Anderson, Rohm and Haas Texas Inc.

Emmet Condon, San Francisco Fire Dept., CA Rep. Fire Marshals Assn. of North America

Herbert W. Eisenberg, Eisenberg Haven Assoc., Inc.

John C. Fannin III, Kidde Systems Inc.

Olin L. Greene, Tallahassee, FL

Rep. Fire Marshals Assn. of North America

Robert T. Kelly, 3M Co.

Rep. NFPA Industrial Fire Protection Section

Richard S. Kraus, Mobil Oil Corp.

Rep. American Petroleum Inst.

Wallace D. Malmstedt, American Insurance Assn.

Richard Oggero, The Weitz Co., Inc.

Donald L. Robinson, Detroit Fire Dept., MI

Walter Smittle III, Charleston, WV

Rep. FMANA

Alternates

William G. Carpenter, Marshfield, MA
(Alternate to IAFF Representative)
Michael S. Hildebrand, American Petroleum
Inst.

(Alternate to R. S. Kraus)

Gerald E. Lingenfelter, American Insurance Assn.

(Alternate to W. D. Malmstedt)

This list represents the membership at the time the Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred.

NOTE: Membership on a Committee shall not in and of itself constitute an endorsement of the Association or any document developed by the Committee on which the member serves.

Contents

CONTENTS

Chapter 1 Administration and Enforcement	. 1	- 5
1-1 Title and Scope	. 1	- 5
1-1.1 Title	. 1	- 5
1-1.2 Scope	. 1	- 5
1-2 Application, Validity, Retroactivity, Limitations, Damage or Injury	_	_
Liability and Adopted References	. 1	- 5
1-9 1 Application	- 1	- 5
1-2.2 Existing Law Continued	· I	- 5
1-2.3 Severability	·Ţ	- 5
1-2.4 Other Laws, Limitations and Permits	. 1	- 5
1-2.5 Codes and Standards Adopted	. 1	- 5
1-3 Authority	. 1	- 5
1-3.1 Administration and Enforcement	. 1	- 5
1-3.2 Enforcement Assistance 1-3.3 Alternatives	. 1	- 3
1-3.3 Alternatives	. 1	- 5
1-3.4 Right of Entry	. 1	- 0
1-3.5 Authority to Investigate Fires and Explosions	. 1	- 6
1-4.1 Responsibility for Code Enforcement	. 1	- 6
1-4.2 Hazard Abatement Procedures	1	- 6
1-4.3 Serving of Notices	1	- 6
1-4.4 Revocation, Suspension or Denial of Permits,		- 0
Approvals or Certificates	1	- 6
1-4.5 Records Required	ī	- 6
1-5 Board of Appeals	. 1	- 7
1-5.1 Appointment	. 1	- 7
1-5.2 Purpose	. 1	- 7
1-5.3 Duties	. 1	- 7
1-5.4 Fire Marshal Order Stayed	. 1	- 7
1-6 Violations	. 1	- 7
1-6.1 General	. 1	- 7
1-7 Permits	. 1	- 7
1-7.1 General	. 1	- 7
1-7.2 Permit Required	. 1	- 7
1-7.3 Processing and Use of Permits	. 1	- 7
1-8 Approvals	. 1	- 8
1-8.1 General	. 1	- 8
1-8.3 Records	. 1	- 8
1-9 Certificates of Fitness	. 1	- 8
Clause Q. Definitions		
Chapter 2 Definitions 2-1 Definitions		
z-1 Definitions	- 1	- 0
Chapter 3 General Fire Safety Regulations	1.	-10
3-1 General Precautions	î	-10
3-1.1 Ordinary Conduct Requirements	î	-10
3-1.2 Precautions Inside Buildings	î	-12
3-1.3 Precautions Outside Buildings	1	-12
3-2 Fumigation	. 1	-12
3-3 Combustible Waste and Refuse	.1	-12
3-3.1 General Requirements		
3-3.2 Disposal of Combustible Waste	. 1	-12
3-3.3 Waste Disposal Sites	. 1	-12
3-3.3 Waste Disposal Sites	. 1	-12
3-3.5 Waste Handling Plants	. 1	-12
3-4 Factors Affecting Egress	. 1	-12
3-4.1 General Requirements	. 1	-12
3-4.2 Treatment of Interior Finishes and Furnishings	. 1	-13
3-4.3 Combustible Decorations	. 1	-13
3-4.4 Interior Finishes		
3-5 Fire Protection Required	. 1	-13
3-5.1 Portable Fire Extinguishers	. I	-13

3-5.2 Automatic Fire Extinguishing System Required
3-5.3 Standpipes Required
3-5.4 Maintenance of Equipment
3-6 Flammable and Combustible Liquids
3-6.1 Scope
3-6.2 General Requirements
3-6.3 Roofing Kettles
3-7 Compressed and Liquefied Gases
3-8 Solid Combustible Materials
3-8.1 General
3-8.2 Combustible Fibers
3-8.3 Dusts
3-9 Hazardous Materials
3-9.1 General1-16
3-9.2 Matches
3-9.3 Storage of Hazardous Materials1-17
3-9.4 Warning Signs
3-9.5 Transportation of Hazardous Materials1-17
3-10 Industrial Equipment and Processes
Annex and Appendices Annex A NFPA Standards and Codes for Adoption
Annex A NFPA Standards and Codes for Adoption
Appendix A NFPA Publications for Guidance
Appendix B Text for "Fire Safety Regulations"1-21
Appendix C Suggested Adoption Ordinance
Appendix D Explanatory Notes
Appendix E General Authority to Combat Fires and Related Emergencies 1-26
Appendix F Appeals Procedure
Appendix G Code Violations1-27
Appendix H Establishing a Permit System
Appendix I Certificates of Fitness
Appendix J Suggested Requirements for On-Premises Fire Fighting Organizations. 1-29
Appendix K Industrial Equipment and Processes
Index

Fire Prevention Code

NFPA 1-1982

Chapter 1 Administration and Enforcement

1-1 Title and Scope.

- 1-1.1 Title. The title of this Code shall be NFPA 1, Fire Prevention Code of the National Fire Protection Association. The short title of this Code shall be the NFPA Fire Prevention Code.
- 1-1.2 Scope. This Code provides for the prevention of fire and explosion through the regulation of conditions which could cause fire or explosion and panic resulting therefrom.

This Code identifies and uses specific standards and codes published by the National Fire Protection Association and sets those requirements necessary for the administration of this Code.

- 1-2 Application, Validity, Retroactivity, Limitations, Damage or Injury Liability and Adopted References.
- 1-2.1 Application. The provisions of this Code shall apply to all buildings, structures, vehicles, marine vessels, premises, and conditions within this jurisdiction. The provisions of this Code shall apply equally to existing as well as new buildings, structures, marine vessels, premises and conditions except that existing buildings, structures, marine vessels, premises and conditions not in compliance with this Code may be permitted to continue unless in the opinion of the Fire Marshal they constitute a fire hazard to life or property.

The provisions of this Code do not apply to one- or twofamily dwellings in the normal use or maintenance thereof.

Exception No. 1: This Code shall apply whenever the activity or use of such dwelling creates a fire hazard to life or property.

Exception No. 2: Where provisions of annexed codes specifically apply to one- or two-family dwellings.

1-2.2 Existing Law Continued. The provisions of this Code, as far as they are substantially the same as existing provisions of law relating to the same subject matter, shall be construed as restatements and continuations thereof and not as new enactments.

The adoption of this Code or the repeal of any other existing provision of law including regulations or orders shall not be construed to alter any time limit which may have been imposed by any existing law, regulation or order of the Fire Marshal relating to compliance with such limits.

1-2.3 Severability. If any provision of this Code is for any reason held to be invalid or unconstitutional by a court of competent jurisdiction, it shall not affect the validity of the remaining provisions of this Code.

1-2.4 Other Laws, Limitations and Permits.

- 1-2.4.1 This Code is intended to be used in conjunction with existing laws and nothing in this Code shall be construed as rendering other applicable laws invalid. In any situation where a conflict exists between a provision of this Code and any existing law, the existing law shall prevail. (See Appendix C, Section 20, and Appendix D-1-2.4.1.)
- 1-2.4.2 No permits set forth in this Code shall be required if the purpose of such permit is the same as any existing permit, license, certificate or approval issued by this jurisdiction or other governmental unit which has preempted this jurisdiction. (See Appendix D-1-2.4.2.)

1-2.5 Codes and Standards Adopted. (See Appendix D-1-2.5.)

- 1-2.5.1 Technical details regarding processes, methods, specifications, equipment testing and maintenance, design standards, performance, installation, or other pertinent criteria as contained in those standards and codes published by the National Fire Protection Association, and listed in Annex A of this Code, shall be considered a part of this Code.
- 1-2.5.2 Applicable provisions of Standards, Laws, Manuals, Guides and Recommended Practices as listed in Appendix A are not required, but may be used by the Fire Marshal as appropriate criteria for meeting the intent of this Code when specific provisions do not exist within this Code or other nationally recognized codes, standards or laws.
- 1-2.5.3 Copies of the adopted codes and standards shall be filed at a public office or offices as required by law and shall be available for public reference. (See Section 1 of Appendix C.)

1-3 Authority. (See Appendix D-1-3.)

- 1-3.1 Administration and Enforcement. This Code shall be administered and enforced by the fire official designated by the governing authority of this jurisdiction as having this responsibility. For purposes of this Code, this fire official is called the Fire Marshal. The Fire Marshal shall meet those qualifications as may be set forth by the jurisdiction as being necessary to administer this Code effectively. (See Appendix D-1-3.1.)
- 1-3.2 Enforcement Assistance. Police and other law enforcement agencies having authority in this jurisdiction shall render necessary assistance in the enforcement of this Code when requested to do so by the Fire Marshal.

1-3.3 Alternatives. (See Appendix D-1-3.3.)

- 1-3.3.1 Whenever this Code requires a particular system, condition, arrangement, material, equipment, or any other particular provision, the Fire Marshal may accept alternatives provided that such alternatives shall afford a substantially equivalent level of safety.
- 1-3.3.2 Application for Alternatives. Each application for an alternative shall be filed with the Fire Marshal and shall be accompanied by such evidence, letters, statements, results of tests or other supporting informa-

tion as may be required to justify the request. The Fire Marshal shall keep a record of actions on such applications and a signed copy of the Fire Marshal's decision shall be provided for the applicant.

1-3.4 Right of Entry.

- 1-3.4.1 To the full extent permitted by law, any fire official engaged in fire prevention and inspection work is authorized at all reasonable times to enter and examine any building, structure, marine vessel, vehicle or premises for the purpose of making fire safety inspections. Before entering a private building or dwelling, the fire official shall obtain the consent of the occupant thereof or obtain a court warrant authorizing entry for the purpose of inspection except in those instances where an emergency exists. As used in this section, "emergency" means circumstances which the fire official knows, or has reason to believe, exist, and which reasonably may constitute immediate danger to life and property.
- 1-3.4.2 Persons authorized to enter and inspect buildings, structures, marine vessels, vehicles, and premises as herein set forth shall be identified by proper credentials issued by this jurisdiction.
- 1-3.4.3 It shall be unlawful for any person to interfere with a fire official carrying out any duties or functions prescribed by this Code.
- 1-3.4.4 It shall be unlawful for any unauthorized person to use an official badge, uniform, or other credentials so as to impersonate a fire official for the purpose of gaining access to any building, structure, marine vessel, vehicle, or premises in this jurisdiction.
- 1-3-4.5 Implied Consent. Any application for, or acceptance of, any permit requested or issued pursuant to this Code constitutes agreement and consent by the person making the application or accepting the permit to allow the Fire Marshal to enter the premises at any reasonable time, to conduct such inspections as required by this Code.
- 1-3.5 Authority to Investigate Fires and Explosions. The Fire Marshal shall have the authority to investigate the cause, origin, and circumstances of any fire or explosion involving a loss of life, injuries to persons, or destruction or damage to property. When, in the opinion of the Fire Marshal, reasonable cause exists that the fire or explosion may have been of incendiary origin, the Fire Marshal shall have the authority to take custody of all physical evidence relating to the cause of the fire or explosion and to continue the investigation to conclusion. Proprietary information which may relate to trade secrets or processes shall not be made part of the public record except as may be directed by a court of law.

1-4 Enforcement Provisions.

1-4.1 Responsibility for Code Enforcement.

1-4.1.1 Administration and Enforcement. The Fire Marshal shall be responsible for the administration and enforcement of this Code to ensure compliance therewith.

- 1-4.1.2 Issuance of Code-Related Documents. The Fire Marshal shall be responsible for the issuance of permits, certificates, notices, and approvals, or orders pertaining to fire control and fire hazards, as provided for in this Code.
- 1-4.1.3 Assistants to Fire Marshal. Qualifications of the personnel assigned to assist the Fire Marshal in carrying out the inspection and enforcement procedures required by this Code shall be established on the basis of merit by reason of education, experience, technical competence or examination.
- 1-4.1.4 Members of the Fire Department may be required to carry out inspection functions to accomplish the duties imposed by this Code.

1-4.2 Hazard Abatement Procedures.

- 1-4.2.1 Summary Abatement. The Fire Marshal shall have the authority to summarily abate any condition which is in violation of any provision of this Code and which presents immediate fire hazard to life or property.
- 1-4.2.2 Written Notice. Except as provided in 1-4.2.1 of this Code, whenever the Fire Marshal shall find violations of this Code, a written notice shall be issued to confirm such findings. Every notice shall set forth a time limit for compliance. Such time limit shall be correlated to the degree of hazard created by the violation and availability of means of abatement.
- 1-4.2.3 Existing Condition Correction Notice. The Fire Marshal shall issue a written notice whenever it is found that a certain provision of this Code shall be applied to existing conditions under the authority of 1-2.1 of this Code.
- 1-4.3 Serving of Notices. Any order or notice issued pursuant to this Code shall be served upon the owner, operator, occupant or other person responsible for the condition or violation, either by personal service, mail, or by delivering the same to, and leaving it with, some person of responsibility upon the premises. For unattended or abandoned locations, a copy of such order or notice shall be posted on the premises in a conspicuous place at or near the entrance to such premises and the order or notice shall be mailed by registered or certified mail, with return receipt requested, to the last known address of the owner, occupant or both.
- 1-4.4 Revocation, Suspension or Denial of Permits, Approvals or Certificates. The Fire Marshal shall have the authority to revoke, suspend or deny the granting of any permit, approval, or certificate required by this Code for noncompliance with the provisions of such a permit, approval, certificate, or failure to meet the provisions of this Code for the issuance of such permit, certificate or approval.
- 1-4.5 Records Required. The Fire Marshal shall keep a record of all fire prevention inspections, including the date of such inspections and a summary of any violations found to exist, the date of the services of notices, and a memorandum of the final disposition of all violations.

All records required to be kept by this section shall be maintained until their usefulness has been served, or as otherwise may be required.

1-5 Board of Appeals. (See Appendix D-1-5 and Section 16 of Appendix C.)

1-5.1 Appointment. A Board of Appeals shall be appointed consisting of members who, by education and experience, are qualified to pass upon the application of this Code as it affects the interests of the general public. Board members shall not be officers, agents, or employees of this jurisdiction. All members and any alternate members shall be appointed and serve in accordance with the terms and conditions of the authority having jurisdiction. The Board shall establish rules and regulations for conducting its business and shall render all decisions and findings in writing to the Fire Marshal, with a copy to the appellant.

No more than one of said members or their alternates shall be engaged in the same business, profession or line of endeavor. No member of the Board of Appeals shall sit in judgment on any case in which the member, personally, is directly interested.

- 1-5.2 Purpose. The Board of Appeals shall provide for reasonable interpretation of the provisions of this Code and rule on appeals from decisions of the Fire Marshal.
- 1-5.3 Duties. The Board of Appeals shall meet whenever directed by the appointing authority for the purpose of interpreting the provisions of this Code and to consider and rule on any properly filed appeal from a decision of the Fire Marshal, giving at least five days notice of hearing, but in no case shall it fail to meet on an appeal within 30 days of the filing of notice of appeal. All of the meetings of the Board shall be open to the public.
- 1-5.4 Fire Marshal Order Stayed. Pending final decision of the Board of Appeals, the order of the Fire Marshal shall be stayed unless there is an immediate fire hazard to life or property.

1-6 Violations.

1-6.1 General. Any person who fails to comply with the provisions of this Code or who fails to carry out an order made pursuant of this Code or violates any condition attached to a permit, approval, or certificate, shall be subject to the penalties established by this jurisdiction. (See Appendix D-1-6.1.)

1-7 Permits. (See Appendix D-1-7.)

1-7.1 General.

1-7.1.1 A permit shall be predicated upon compliance with the requirements of this Code and shall constitute written authority issued by the Fire Marshal to maintain, store, use, or handle materials or to conduct processes which could produce, unless controlled, conditions hazardous to life or property, or to install equipment used in connection with such activities. Any permit issued under this Code shall not take the place of any other license or permit required by other codes or laws of this jurisdiction. (See 1-2.4.2.)

1-7.1.2 A permit issued under this Code shall continue

until revoked or for the period of time designated therein at the time of the issuance of the permit. The permit shall be issued to one person or business only and for the location or purpose described in the permit. Any change which affects any of the conditions of the permit shall require a new or modified permit. (See Appendix D-1-7.1.2.)

- 1-7.1.3 The Fire Marshal may grant an extension of the permit time period upon presentation by the permittee of a satisfactory reason for failure to start or complete the work or activity authorized by the permit within the required time period of the permit.
- 1-7.2 Permit Required. In accordance with the detailed requirements of this jurisdiction, a permit shall be obtained to conduct the following operations, or to store, handle or use those hazardous materials which are considered to present an extra or unusual fire hazard to life or property. (See Appendix D-1-7.2.)

Bonfires and Outdoor Rubbish Fires Combustible Dust-Producing Operations Compressed and Liquefied Gases Explosive Materials Flammable and Combustible Liquids Flammable Finishing Fireworks Pyroxylin Plastics (Cellulose Nitrate) Welding, Cutting and Other Hot Work

- 1-7.2.3 Temporary Permit. When a temporary hazardous situation is anticipated for conditions not otherwise regulated by this Code, the Fire Marshal is authorized, based on applicable data, to issue a temporary special permit for the duration of the hazard.
- 1-7.2.4 Consolidated Permit. Only one permit shall be required for each location of a firm which may be required to obtain more than one permit under permit requirements. Such consolidated permit shall list all hazardous materials or operations covered by the permit. Revocation of any portion or portions of such consolidated permit for specific hazardous materials or operations shall not invalidate any remaining portion of the permit. (See Appendix D-1-7.2.4.)

1-7.3 Processing and Use of Permits.

- 1-7.3.1 Application for Permit. Applications for permits shall be made to the Fire Marshal on forms provided by the jurisdiction and shall include the applicant's answers in full to inquiries set forth on such forms. Applications for permits shall be accompanied by such data as may be required by the Fire Marshal and fees as may be required by the jurisdiction. (See Appendix D-1-7.3.1.)
- 1-7.3.2 Review and Issuance. The Fire Marshal shall review all applications submitted, determine compliance with applicable provisions of the Code and issue permits as required. If an application for a permit is rejected by the Fire Marshal, the applicant shall be advised of the reasons for such rejection. Permits for activities requiring evidence of financial responsibility by the jurisdiction shall not be issued unless proof of required financial responsibility is furnished.

1-7.3.3 Display of Permits. A copy of the permit shall be posted or otherwise readily accessible at each place of operation, or carried by the permit holder as specified by the Fire Marshal.

1-7.3.4 Authority to Require Exposure or Stop Work. Whenever any installation that is subject to inspection prior to use is covered or concealed without having first been inspected, the Fire Marshal may require by written notice that such work be exposed for inspection. The Fire Marshal shall be notified when the installation is ready for inspection and the Fire Marshal shall conduct the inspection within a reasonable period of time.

When any construction or installation work is being performed in violation of the plans and specifications as approved by the Fire Marshal, a written notice shall be issued to the responsible party to stop work on that portion of the work which is in violation. The notice shall state the nature of the violation, and no work shall be continued on that portion until the violation has been corrected.

- 1-7.3.5 Compliance Required. Any activity authorized by any permit issued under this Code shall be conducted by the permittee, the permittee's agents or employees in compliance with all requirements of this Code applicable thereto, and in accordance with the approved plans and specifications. No permit issued under this Code shall be interpreted to justify a violation of any provision of this Code or any other applicable law or regulation. Any addition or alteration of activities conducted under a permit issued under this Code, or any addition or alteration of approved plans or specifications, shall be approved in advance by the Fire Marshal, as evidenced by the issuance of a new or amended permit.
- 1-7.3.6 Permit Contents. Permits shall be issued by the Fire Marshal and shall bear the name and signature of the Fire Marshal or that of the Fire Marshal's designated representative. In addition, the permit shall show:
- (a) Operation or activities for which the permit is issued.
- (b) Address or location where the operation or activity is to be conducted.
 - (c) Name and address of the permittee.
 - (d) Permit number and date of issuance.
- (e) Period of validity of the permit. (See Appendix D-1-7.1.2.)
 - (f) Inspection requirements.

1-8 Approvals.

- 1-8.1 General. The Fire Marshal shall examine the submitted plans for evidence of compliance with this Code. The Fire Marshal may require tests or other investigations to be conducted by an agency satisfactory to the jurisdiction when an appliance, device, equipment or systems intended for installation does not specifically meet the requirements of this Code, but meets the intent of this Code. Such tests or investigations shall be based on test standards or principles. (See Appendix D-1-8.1.)
- 1-8.2 Buildings and structures shall not be occupied

prior to being approved by the Fire Marshal that applicable provisions of this Code have been met.

- 1-8.3 Records. A record of examinations, approvals and exceptions granted shall be maintained in the Office of the Fire Marshal and shall be available to all persons for public inspection during business hours.
- 1-9 Certificates of Fitness. When certificates of fitness are required by this jurisdiction for performance of activities related to fire safety, the Fire Marshal shall be responsible for their issuance. (See Appendix D-1-9.)

Chapter 2 Definitions

2-1 Definitions. Words defined in this Code are intended only for use with sections of this Code. Definitions set forth in any document referenced by this Code shall be the acceptable definition for use of that document only. Words not specifically defined in this Code or other referenced documents shall have their ordinarily accepted meanings or such as the context may imply.

Alternative. A system, condition, arrangement, material or equipment submitted to the Fire Marshal as a substitute for a Code requirement.

Approved. Acceptable to the "authority having jurisdiction."

NOTE: The National Fire Protection Association does not approve, inspect or certify any installations, procedures, equipment, or materials nor does it approve or evaluate testing laboratories. In determining the acceptability of installations or procedures, equipment or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization concerned with product evaluations which is in a position to determine compliance with appropriate standards for the current production of listed items.

Automatic Fire Extinguishing System. Any system which is designed and installed to detect a fire and subsequently to discharge an extinguishing agent without the necessity of human intervention.

Barrel. Forty-two US Gallons (158 L).

Basement. A story with more than 50 percent of its cubic volume below grade.

Board of Appeals. A group of persons appointed by the governing body of the jurisdiction adopting this Code for the purpose of hearing and adjudicating differences of opinion between the Fire Marshal and the citizenry in the interpretation, application and enforcement of this Code.

Certificate. A written document issued by authority

1-9

of the Fire Marshal to any person for the purpose of granting permission to such person to conduct or engage in any operation or act for which certification is required.

Combustible Fiber. Any material in a fibrous or shredded form which will readily ignite when heat sources are present.

Combustible Refuse. All combustible or loose rubbish, litter, or waste materials generated by an occupancy which are refused, rejected, or considered worthless and are disposed of by incineration on the premises where generated or periodically transported from the premises.

Combustible Waste. Combustible or loose waste materials which are generated by an establishment or process, and, being salvageable, are retained for scrap for reprocessing on the premises where generated or transported to a plant for processing. These include, but are not limited to, all combustible fibers, hay, straw, hair, feathers, down, wood shavings, turnings, all types of paper products, soiled cloth trimmings and cuttings, rubber trimmings and buffings, metal fines, and any mixture of the above items, or any other salvageable combustible waste materials.

Dwelling. A single unit providing complete and independent living facilities for one or more persons including permanent provisions for living, sleeping, eating, cooking and sanitation.

Existing Condition. Any situation, circumstance, or process which was ongoing or in effect prior to the adoption of this Code.

Explosive Materials. Explosives, blasting agents, water gels (slurries) and detonators. (See NFPA 495, Code for Explosive Materials, Annex A, for classification of explosives.)

Fire Door. A tested, listed, or approved door and door assembly constructed and installed for the purpose of preventing the spread of fire through openings in walls, partitions, or other horizontal or vertical construction. (See NFPA 80, Standard for Fire Doors and Windows, Annex A, for classification and types of fire doors.)

Fire Hazard. Any situation, process, material or condition which, on the basis of applicable data, may cause a fire or explosion or provide a ready fuel supply to augment the spread or intensity of the fire or explosion and which poses a threat to life or property.

Fire Hydrant. A valved connection on a water supply system having one or more outlets and which is used to supply hose and fire department pumpers with water.

Fire Lane. The road, path, or other passageway developed to allow the passage of fire apparatus through congested areas (both built-up and wildland).

Fire Marshal. The individual designated as the administrative head of the agency, bureau or division responsible for the administration and enforcement of this Code. The Fire Department Chief Administrative

Officer shall assume these responsibilities in those jurisdictions where a separate agency, bureau or division is not established. Other titles used to designate this individual are: Fire Prevention Official, Chief Fire Prevention Officer, Chief of the Bureau of Fire Prevention, or Fire Prevention Chief. For purposes of enforcement of this Code, this term shall also apply to any person designated as a representative of the Fire Marshal.

Fire Official. Any authorized person serving as a designated employee, representative, or agent of the Fire Department.

Fire Protection System. Any fire alarm device or system, or fire extinguishing device or system, or their combination, which is designed and installed for detecting, controlling, or extinguishing a fire, or otherwise alerting occupants or the fire department, or both, that a fire has occurred.

Fire Retardants. Liquids, solids or gases which tend to inhibit combustion when applied on, mixed in, or combined with combustible materials.

Fireworks Display. The use of fireworks in a manner to provide audio and visual entertainment to a group of people.

Flamespread Rating. The comparative performance of fire travel over the surface of a material when tested in accordance with the provisions of NFPA 255, Method of Test of Surface Burning Characteristics of Building Materials (see Appendix A). Grouping of ratings is listed in NFPA 101®, Life Safety Code® (see Annex A).

Gallon. One US Standard Gallon (3.785 L).

Grade. The reference plane representing the average elevation of finished ground level adjoining the building at all exterior walls.

Ground Kettle. A container which may or may not be mounted on wheels and is used for heating tar, asphalt or similar substances.

Jurisdiction. Any governmental unit or political division or subdivision, including, but not limited to, township, city, village, county, borough, state, commonwealth, province, freehold, district, or territory, over which the governmental unit exercises power and authority.

Labeled. Equipment or materials to which has been attached a label, symbol or other identifying mark of an organization acceptable to the "authority having jurisdiction" and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

Listed. Equipment or materials included in a list published by an organization acceptable to the "authority having jurisdiction" and concerned with product evaluation, that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

NOTE: The means for identifying listed equipment may vary for each organization concerned with product evaluation, some of which do not recognize equipment as listed unless it is also labeled. The "authority having jurisdiction" should utilize the system employed by the listing organization to identify a listed product.

Loose House. A separate detached building in which unbaled combustible fibers are stored.

Marine Vessel. Every description of water craft or other artificial contrivance used as a means of transportation in or on the water.

Notice. A written statement which gives an order, information or warning.

Patch Kettle. Any pot or container with a capacity of less than six gal (22.71 L), used for preheating tar, asphalt, pitch, or similar substances for the repair of roofs, streets, floors, pipes, or similar objects.

Permit. An official document issued by the authority having jurisdiction for the purpose of authorizing performance of a specified activity.

Private Building. A building, or that portion of a building, which is normally not frequented by, nor open to, the public.

Private Dwelling. The same as dwelling.

Process. The manufacturing, handling, blending, conversion, purification, recovery, separation, synthesis or use, or any combination, of any commodity or material regulated by this Code.

Roofing Kettle. Any container in excess of 15-gal (56.78-L) capacity used for preheating tar, asphalt, pitch or similar substances for waterproofing.

Shall. Indicates a mandatory requirement.

Should. Indicates a recommendation or that which is advised but not required.

Smoking. Lighting, igniting, holding, or possessing any lighted cigar, cigarette or pipe, or carrying, throwing, or depositing any lighted or smoldering cigar, cigarette or pipe.

Smoking Area. A designated area where smoking is permitted within premises where smoking is generally prohibited.

Standard. A document containing only mandatory provisions using the word "shall" to indicate requirements. Explanatory material may be included only in the form of "fine print" notes, in footnotes, or in an appendix.

Standpipe. A pipe and attendant hose valves and

hose (if provided) used for conveying water to various parts of a building for fire fighting purposes.

Story. That portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above.

Street. Any public thoroughfare (street, avenue, boulevard) 30 ft (9.14 m) or more in width that has been dedicated or deeded to the public for public use and is accessible for use by the fire department in fighting fire. Enclosed spaces and tunnels, even though used for vehicular and pedestrian traffic, are not considered as streets for the purposes of this Code.

Summarily Abate. To immediately judge a condition to be a fire hazard to life or property and to order immediate correction of such condition.

Supervised Automatic Fire Extinguishing System. Any automatic fire extinguishing system which is constantly monitored so as to determine operating conditions at all times.

System. Several items of equipment assembled, grouped or otherwise interconnected for the accomplishment of a purpose or function.

Water Capacity. The volumetric measure of the amount of water a container can hold.

Written Notice. A notification in writing delivered in person to the individual or parties intended, or delivered at, or sent by certified or registered mail to, the last residential or business address of legal record.

Chapter 3 General Fire Safety Regulations

- 3-1 General Precautions.
- 3-1.1 Ordinary Conduct Requirements.
- 3-1.1.1 Spread of Fire. No person shall knowingly permit any fire to spread so as to endanger life or property or use or operate any device which may be a source of ignition unless proper removal of flammable or combustible material surrounding the operation is accomplished or such other reasonable precautions are taken to ensure against the starting and spreading of unwanted fires.
- 3-1.1.2 Notifying the Fire Department. Whenever an unwanted fire occurs in any building or on any premises of any kind, the owner, manager, occupant, or any person in control of such building or premises, upon discovery of an unwanted fire, or evidence of there having been an unwanted fire, even though it has apparently been extinguished, immediately shall cause notice of the existence of such fire, circumstances of same, and the location thereof to be given to the Fire Department. This requirement shall not be construed to forbid the owner,

manager, or other person in control of the aforementioned building or premises from using all diligence necessary to extinguish such fire prior to the arrival of the Fire Department.

No person shall make, issue, post, or maintain any regulation or order, written or verbal, that would require any person to take any unnecessary delaying action prior to reporting a fire to the Fire Department.

Exception: This section shall not apply to firms which have established on-premises fire fighting organizations and have coordinated and arranged procedures approved by the Fire Marshal. (See Appendix D-3-1.1.2.)

3-1.1.3 Reporting Hazardous Condition. Any person, upon discovering evidence of spontaneous heating or other abnormal heating of any merchandise, commodity, cargo, shipment, or other material of any kind in any building, marine vessel, appliance, apparatus, tank, or open stack or pile, or any person upon discovering or being apprised of any uncontrolled hazardous gas leak or hazardous material or combustible or flammable liquid spill, shall immediately notify the Fire Department. (See Appendix D-3-1.1.2.)

Exception: This section shall not apply to firms which have established on-premises fire fighting organizations and have coordinated and arranged procedures approved by the Fire Department. (See Appendix D-3-1.1.2 and Appendix J.)

- 3-1.1.4 Maintaining a Fire Hazard. No person shall knowingly maintain a fire hazard.
- 3-1.1.5 Carelessness with Fire. No person shall deliberately, or through carelessness or negligence, set fire to or cause the burning of any material, in such manner as to endanger the safety of any person or property.
- 3-1.1.6 Posting of Fire Safety Regulations. Hotels, motels, and similar occupancies designed for, intended for, or used by transients shall have an approved copy of fire safety regulations for transients conspicuously posted in the lobby and each occupancy unit and at such other locations as may be required by the Fire Marshal. (See Appendix B.)
- 3-1.1.7 Notification of Fire Department of Inoperative Fire Safety Equipment. Persons owning, controlling, or otherwise having charge of any fixed fire extinguishing or fire warning system or standpipe system shall notify the Fire Department at any time such system or systems are inoperable or taken out of service. The Fire Department shall also be notified when service is restored. (See Appendix D-3-5.4.)

Exception: This section shall not apply to firms which have established on-premises fire fighting organizations and have coordinated and arranged procedures approved by the Fire Marshal. (See Appendix D-3-1.1.7 and Appendix J.)

3-1.1.8 Disposal of Hot and Glowing Materials. Hot ashes, cinders, or smoldering coals shall be placed in noncombustible receptacles. Such receptacles, unless resting on a noncombustible floor or on the ground outside the building, shall be placed on noncombustible

stands, and in every case shall be kept a distance of at least 2 ft (0.61 m) laterally away from any combustible material, structure, or any exterior window opening.

3-1.1.9 Barricading Vacant Buildings. Every person owning or having charge or control of any vacant building shall remove all combustible waste and refuse therefrom and lock, barricade, or otherwise secure all windows, doors, and other openings in the building to prohibit entry by unauthorized persons.

Exception: This section is not intended to apply to vacation or resort facilities or buildings used on a seasonal basis or the temporary vacancy of a building for tenant change or remodeling purposes.

3-1.1.10 Required Access for Fire Apparatus. All premises which the Fire Department may be called upon to protect in case of fire and which are not readily accessible from public roads shall be provided with suitable gates, access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus.

Fire lanes shall be provided for all buildings which are set back more than 150 ft (45.75 m) from a public road or exceed 30 ft (9.14 m) in height and are set back over 50 ft (15.25 m) from a public road.

Fire lanes shall be at least 20 ft (6.1 m) in width with the road edge closest to the building at least 10 ft (3.05 m) from the building. Any dead-end road more than 300 ft (91.5 m) long shall be provided with a turn-around at the closed end at least 90 ft (27.45 m) in diameter.

The designation, use, and maintenance of fire lanes on private property shall be accomplished as specified by the Fire Marshal.

It shall be unlawful for any person to park motor vehicles on, or otherwise obstruct, any fire lane.

Exception: When any combination of private fire protection facilities, including, but not limited to, fire-resistive roofs, fire separation walls, space separation and automatic fire extinguishing systems, are provided and approved by the Fire Marshal as an acceptable alternate, 3-1.1.10 shall not apply.

3-1.1.11 Smoking. Where conditions exist which make smoking a fire hazard on any premises, "No Smoking" signs shall be posted as directed by the Fire Marshal. "No Smoking" signs shall be of a color, size, lettering, and location as approved by the Fire Marshal. No person shall remove such "No Smoking" signs or light, or ignite, or otherwise set fire to or smoke any cigar, cigarette, pipe, tobacco, or other form of smoldering substance, nor hold, possess, throw, or deposit any lighted or smoldering substance in any place where occasion or action would constitute a fire or life hazard.

Nothing in the foregoing provision shall be construed as prohibiting smoking in areas, offices, or other rooms which have been designated by the Fire Marshal as safe smoking areas and have been approved for such purpose.

Exception: This paragraph shall not apply to organizations having an established on-premises fire prevention program setting forth regulations requiring periodic fire prevention inspection and enforcing in-plant fire prevention rules. Such programs shall be coordinated with and approved by the Fire Marshal.