2012 IFC® CODE AND COMMENTARY

The complete IFC with commentary after each section

2012 IFC®

CODE AND COMMENTARY

INTERNATIONAL CODE COUNCIL®

2012 International Fire Code® Commentary

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PREFACE

The principal purpose of the Commentary is to provide a basic volume of knowledge and facts relating to building construction as it pertains to the regulations set forth in the 2012 *International Fire Code*. The person who is serious about effectively designing, constructing and regulating buildings and structures will find the Commentary to be a reliable data source and reference to almost all components of the built environment.

As a follow-up to the *International Fire Code*, we offer a companion document, the *International Fire Code Commentary*. The basic appeal of the Commentary is thus: it provides in a small package and at reasonable cost thorough coverage of many issues likely to be dealt with when using the *International Fire Code* — and then supplements that coverage with historical and technical background. Reference lists, information sources and bibliographies are also included.

Throughout all of this, effort has been made to keep the vast quantity of material accessible and its method of presentation useful. With a comprehensive yet concise summary of each section, the Commentary provides a convenient reference for regulations applicable to the construction of buildings and structures. In the chapters that follow, discussions focus on the full meaning and implications of the code text. Guidelines suggest the most effective method of application, and the consequences of not adhering to the code text. Illustrations are provided to aid understanding; they do not necessarily illustrate the only methods of achieving code compliance.

The format of the Commentary includes the full text of each section, table and figure in the code, followed immediately by the commentary applicable to that text. At the time of printing, the Commentary reflects the most up-to-date text of the 2012 *International Fire Code*. Each section's narrative includes a statement of its objective and intent, and usually includes a discussion about why the requirement commands the conditions set forth. Code text and commentary text are easily distinguished from each other. All code text is shown as it appears in the *International Fire Code*, and all commentary is indented below the code text and begins with the symbol ❖.

Readers should note that the Commentary is to be used in conjunction with the *International Fire Code* and not as a substitute for the code. The Commentary is advisory only; the code official alone possesses the authority and responsibility for interpreting the code.

Comments and recommendations are encouraged, for through your input, we can improve future editions. Please direct your comments to the Codes and Standards Development Department at the Chicago District Office.

The International Code Council would like to extend its thanks to the following individuals for their contributions to the technical content of this commentary:

David Fredrickson
Gene Boecker
Marcelo Hirschler

Arrangement and Format of the 2012 IFC

Before applying the requirements of the IFC it is beneficial to understand its arrangement and format. The IFC, like other codes published by the International Code Council, is arranged and organized to follow sequential steps that generally occur during a plan review or inspection. The 2012 IFC has been reorganized into 7 Parts as illustrated in the tables below. Each Part represents a broad subject matter and includes the chapters that logically fit under the subject matter of each Part. It is also foreseeable that additional chapters will need to be added in the future as regulations for new processes or operations are developed. Accordingly, the reorganization was designed to accommodate such future chapters by providing reserved (unused) chapters in several of the Parts. This will allow the subject matter parts to be conveniently and logically expanded without requiring a major renumbering of the IFC chapters.

2012 REORGANIZATION OF THE IFC	
Parts and Chapters	**Subject Matter**
Part I – Chapters 1 and 2	Administrative and definitions
Part II – Chapters 3 and 4	General safety provisions
Part III – Chapters 5 through 11	Building and equipment design features
Part III - Chapters 12 through 19	Reserved for future use
Part IV – Chapters 20 through 36	Special occupancies and operations
Part IV – Chapters 37 through 49	Reserved for future use
Part V – Chapters 50 through 67	Hazardous materials
Part V – Chapters 68 through 79	Reserved for future use
Part VI – Chapter 80	Referenced standards
Part VII - Appendices A through J	Adoptable and informational appendices

2012 IFC CHAPTER REORGANIZATION		
CHAPTER NUMBER 2009	**CHAPTER NUMBER 2012**	**CHAPTER TITLE**
1	1	Scope and Administration
2	2	Definitions
3	3	General Requirements
4	4	Emergency Planning and Preparedness
5	5	Fire Service Features
6	6	Building Services and Systems
7	7	Fire-Resistance-Rated Construction
8	8	Interior Finish, Decorative Materials and Furnishings
9	9	Fire Protection Systems
10	10	Means Of Egress
11	20	Aviation Facilities
12	21	Dry Cleaning
13	22	Combustible Dust-Producing Operations
14	33	Fire Safety during Construction and Demolition
15	24	Flammable Finishes
16	25	Fruit and Crop Ripening
17	26	Fumigation and Insecticidal Fogging
18	27	Semiconductor Fabrication Facilities
19	28	Lumber Yards and Woodworking Facilities
20	29	Manufacture of Organic Coatings
21	30	Industrial Ovens
22	23	Motor Fuel-Dispensing Facilities and Repair Garages
23	32	High-Piled Combustible Storage
24	31	Tents and Other Membrane Structures
25	34	Tire Rebuilding and Tire Storage
26	35	Welding and Other Hot Work
27	50	Hazardous Materials—General Provisions
28	51	Aerosols
29	52	Combustible Fibers
30	53	Compressed Gases
31	54	Corrosive Materials
32	55	Cryogenic Fluids
33	56	Explosives and Fireworks
34	57	Flammable and Combustible Liquids
35	58	Flammable Gases and Flammable Cryogenic Fluids
36	59	Flammable Solids
37	60	Highly Toxic and Toxic Materials
38	61	Liquefied Petroleum Gases
39	62	Organic Peroxides

(continued)

2012 IFC CHAPTER REORGANIZATION—continued		
CHAPTER NUMBER 2009	**CHAPTER NUMBER 2012**	**CHAPTER TITLE**
40	63	Oxidizers, Oxidizing Gases and Oxidizing Cryogenic Fluids
41	64	Pyrophoric Materials
42	65	Pyroxylin (Cellulose Nitrate) Plastics
43	66	Unstable (Reactive) Materials
44	67	Water-Reactive Solids and Liquids
45	36	Marinas
46	11	Construction Requirements for Existing Buildings
47	80	Referenced Standards
Appendix A-J	Appendix A-J	No changes in reorganization

The IFC requirements for fire-resistive construction, interior finish, fire protection systems, means of egress and construction safeguards are directly correlated to the chapters containing parallel requirements in the IBC, as follows:

IFC Chapter	Subject
7	Fire-resistance-rated construction
8	Interior finish, decorative materials and furnishings
9	Fire protection systems
10	Means of egress
33	Fire safety during constructin and demolition

LEGISLATION

The *International Codes* are designed and promulgated to be adopted by reference by legislative action. Jurisdictions wishing to adopt the 2012 *International Fire Code Commentary* as an enforceable set of regulations for the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises should ensure that certain factual information is included in the adopting legislation at the time adoption is being considered by the appropriate governmental body. The following sample adoption legislation addresses several key elements, including the information required for insertion into the code text.

SAMPLE LEGISLATION FOR ADOPTION OF THE *INTERNATIONAL FIRE CODE* ORDINANCE NO._____

A**[N] [ORDINANCE/STATUTE/REGULATION]** of the **[NAME OF JURISDICTION]** adopting the 2012 edition of the *International Fire Code*, regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises in the **[NAME OF JURISDICTION]**; providing for the issuance of permits and collection of fees therefor; repealing **[ORDINANCE/STATUTE/REGULATION]** No. _____ of the **[NAME OF JURISDICTION]** and all other ordinances or parts of laws in conflict therewith.

The **[GOVERNING BODY]** of the **[NAME OF JURISDICTION]** does ordain as follows:

Section 1. That a certain document, three (3) copies of which are on file in the office of the **[TITLE OF JURISDICTION'S KEEPER OF RECORDS]** of **[NAME OF JURISDICTION]**, being marked and designated as the *International Fire Code*, 2012 edition, including Appendix Chapters **[FILL IN THE APPENDIX CHAPTERS BEING ADOPTED]** (see *International Fire Code* Section 101.2.1, 2012 edition), as published by the International Code Council, be and is hereby adopted as the Fire Code of the **[NAME OF JURISDICTION]**, in the State of **[STATE NAME]** regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said Fire Code on file in the office of the **[NAME OF JURISDICTION]** are hereby referred to, adopted, and made a part hereof, as if fully set out in this legislation, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this ordinance.

Section 2. That the following sections are hereby revised:

Section 101.1. Insert: **[NAME OF JURISDICTION]**

Section 109.4. Insert: **[OFFENSE, DOLLAR AMOUNT, NUMBER OF DAYS]**

Section 111.4. Insert: **[DOLLAR AMOUNT IN TWO LOCATIONS]**

Section 3. That the geographic limits referred to in certain sections of the 2012 *International Fire Code* are hereby established as follows:

Section 5704.2.9.6.1 (geographic limits in which the storage of Class I and Class II liquids in above-ground tanks outside of buildings is prohibited): **[JURISDICTION TO SPECIFY]**

Section 5706.2.4.4 (geographic limits in which the storage of Class I and Class II liquids in above-ground tanks is prohibited): **[JURISDICTION TO SPECIFY]**

Section 5806.2 (geographic limits in which the storage of flammable cryogenic fluids in stationary containers is prohibited): **[JURISDICTION TO SPECIFY]**

Section 6104.2 (geographic limits in which the storage of liquefied petroleum gas is restricted for the protection of heavily populated or congested areas): **[JURISDICTION TO SPECIFY]**

Section 4. That **[ORDINANCE/STATUTE/REGULATION]** No. _____ of **[NAME OF JURISDICTION]** entitled **[FILL IN HERE THE COMPLETE TITLE OF THE LEGISLATION OR LAWS IN EFFECT AT THE PRESENT TIME SO THAT THEY WILL BE REPEALED BY SPECIFIC REFERENCE]** and all other ordinances or parts of laws in conflict herewith are hereby repealed.

Section 5. That if any section, subsection, sentence, clause or phrase of this legislation is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The **[GOVERNING BODY]** hereby declares that it would have passed this law, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

Section 6. That nothing in this legislation or in the Fire Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Section 4 of this law; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this legislation.

Section 7. That the **[JURISDICTION'S KEEPER OF RECORDS]** is hereby ordered and directed to cause this legislation to be published. (An additional provision may be required to direct the number of times the legislation is to be published and to specify that it is to be in a newspaper in general circulation. Posting may also be required.)

Section 8. That this law and the rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect **[TIME PERIOD]** from and after the date of its final passage and adoption.

TABLE OF CONTENTS

Part I—Administrative

Chapter 1: Scope and Administration

General Comments

This chapter addresses the administration and enforcement of the code. The objectives and mandate for enforcement are beyond the scope of this chapter. Before adopting the code, a state or local government must establish and designate an agency having staff trained to administer and enforce the code. The administrative relationships, designation of the enforcement authority (fire code official), funding, training and certification of inspectors and scope of the enforcement program are determined by the adopting body.

Management personnel generally perform functions, such as planning, organizing, directing, controlling, analyzing and budgeting. Though the code administrator's duties may include all of these functions, this chapter takes a much narrower view of the code administrative function, dealing mainly with technical and legal areas. Fire prevention code administration must be considered in the context of a complex environment containing political, social, economic, technical and legal dimensions. Enforcement, too, is a broad, all-inclusive term that includes a range of activities aimed at identifying and eliminating hazards; in this case, hazards causing or contributing to a fire or impairing life safety.

Four functions are commonly associated with enforcement: inspecting, detecting, notifying and reporting [see Figure 1(1)1]. Chapter 1 serves as the basis for administering a code enforcement program consisting of these functions. This chapter describes the technical and legal requirements associated with administering a code enforcement program to achieve these functions. The examination of these concepts specifically provides a better understanding of the fire code official's authority, duties and liabilities.

Two main duties of the fire code official are administration and enforcement. In administration, the following concepts are most important:

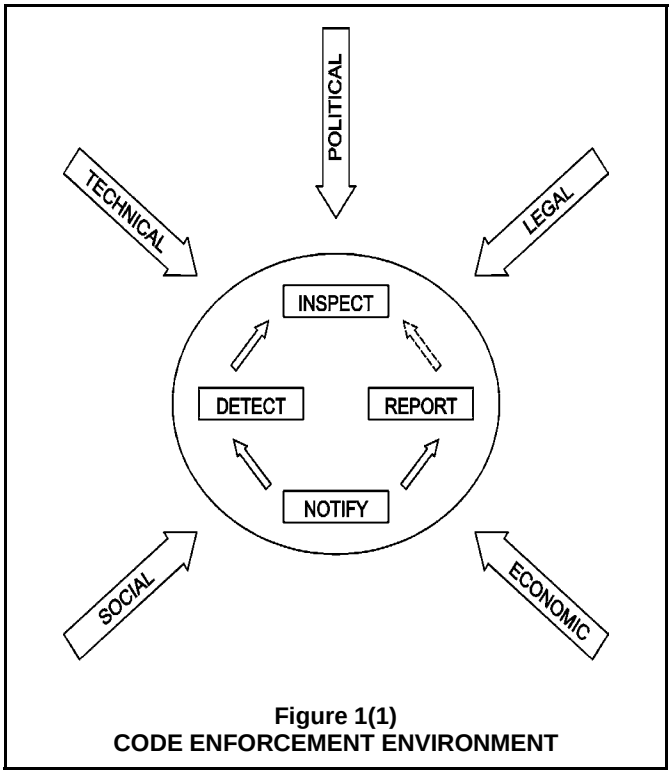


Figure 1(1)
CODE ENFORCEMENT ENVIRONMENT

Code Administrative Environment

Many administrative or management functions are not addressed in the code. Before provisions of this document can be of any use, many basic questions must be answered. Jurisdictions adopting a code enforcement program are using discretionary powers to fulfill a community need. The need in the community must be clearly identified; the program mission clearly established; and the most appropriate delivery system selected. To address the technical and legal demands of the code administrative environment, the code assumes that jurisdictions adopting the document are interested in protecting the health, safety and welfare of its citizens from the effects of fires and explosions. Additionally, the code assumes that these jurisdictions are authorized to use the police power of the state to receive these benefits. Finally, the code assigns principal responsibility for enforcing this document to the department or agency (fire department or fire prevention bureau) most frequently available to perform this mission.

The particular objectives and social or political mandate of a code enforcement program are not considered in the context of this document. These items, however, are often cited as the most frustrating problems faced by code administrators. Code enforcers often complain of being overwhelmed by demands for leniency or special consideration based on the economic, social or political effects of their decisions.

As stated, this chapter establishes ground rules for enforcing the code; however, these ground rules are

only the technical and legal requirements binding both fire code officials and the general public. For guidance on the political, social and economic considerations associated with code enforcement activities, adopting authorities must turn elsewhere; however, none of this is intended to imply that these considerations are absent from the code process. To the contrary, by establishing these requirements as "minimums," the ICC voting membership (see ICC Board of Directors Policy CP-28) has, through a democratic process of public hearings and debate, attempted to weigh these considerations carefully when deliberating, modifying and adopting the provisions appearing in this document. In the end, each jurisdiction must give careful consideration to how these requirements should be adopted; who should be responsible for enforcing them; how enforcement personnel should be trained; how the operation will be financed; and when and how to modify or change operations, if necessary. These considerations deserve careful, thorough public attention before a decision is made to adopt and enforce the code.

Scope and Applicability of the Code

The code applies to new and existing structures and premises as prescribed in Sections 102.1 and 102.2, in matters related to occupancy and maintenance for the protection of lives and property from fire. Conditions possibly causing or contributing to the start or spread of fire, or protecting life from hazardous incidents to occupancy and the maintenance are regulated as follows:

Retroactivity: Because the code applies to both new and existing structures and premises as prescribed in Sections 102.1 and 102.2, the existing building provisions may be considered retroactive. Existing structures and premises built in compliance with the codes and standards in effect at the time of their original construction or alteration are not in all cases exempt from code compliance.

Other codes and standards: The code relies heavily on other codes and standards to specify a means of complying with its provisions, including, among others, the *International Building Code*® (IBC®), the *International Mechanical Code*® (IMC®), the *International Fuel Gas Code*® (IFGC®) and the standards referenced in the text. Additionally, other federal, state and local codes and ordinances may establish certain requirements related to fire protection and life safety. Code requirements are intended to complement other regulations. When conflicts arise between code provisions and the referenced standards, the code provisions apply. Where a standard provides additional technical detail or guidance beyond that provided in the related code text, the fire code official must use judgment when applying these provisions to prevent conflicts with the code provisions. If a conflict arises, it is the fire code official's duty to determine which provisions secure the code's intent. When a conflict between codes or other legal action causes a portion of this document to be "struck down," such action is not intended to invalidate the remaining code provisions. The severability of code provisions, however, does not imply that these same provisions should be considered or applied outside of their context as a part of the code.

Fire Code Official's Judgment

The code relies heavily not only on other codes and standards but also on the judgment and experience of the fire code official.

Approval: The code details occupancy and maintenance requirements; however, it relies heavily on performance criteria, as opposed to detailed specifications, to accomplish this task. The fire code official, therefore, must exercise judgment when approving or permitting operations, processes and procedures required by the code. Proof of compliance may include certification or labeling by independent testing laboratories; however, regardless of the conclusions of these external agencies and authorities, the fire code official remains the sole judge of what fulfills the intent of the code. This becomes particularly important when the fire code official is asked to evaluate equivalent methods and materials. Having piles of data may seem helpful, but the data may prove to be meaningless when it is considered in the context of the code's intent. Data in support of alternative methods and materials must demonstrate not only compliance with the code's intent but also relevance to the issues at hand. Evidence, such as a label or an independent laboratory test report, may sometimes be used inappropriately to support an application for recognition of equivalency. The fire code official must evaluate all submitted evidence to make sure it applies to its intended use, as well as to the code's intent. In an increasingly technical and litigious society, learning how to make such decisions and judgments may be the biggest challenge facing fire code officials. Relying on strict interpretations of intent or the "letter" of the code may be the conservative way, but conservative approaches may simply increase the social and political pressures confronting fire code officials. Computers have become desktop fixtures in today's professional offices. Decision aids taking advantage of contemporary computer technology have become increasingly popular as well. These models permit designers to quickly and easily evaluate the relationships and performance of a variety of complex variables.

Another model that does not rely on a computer is NFPA 550 [see Figure 1(2)]. This model requires little training to use or understand and is an all-inclusive representation of the variables contributing to fire safety. The model may, therefore, serve as a useful tool for qualitatively evaluating the contribution of various approaches to an overall fire safety system. Once equivalent alternative methods have been identified using the Fire Safety Concepts Tree (see "General Comments" in Chapter 3), quantitative (cost/benefit) analyses may be applied. These decision aids permit a designer to propose more innovative and creative responses to complex problems. Fire code officials

must begin to recognize, use and interpret these tools and data to maintain effective protection.

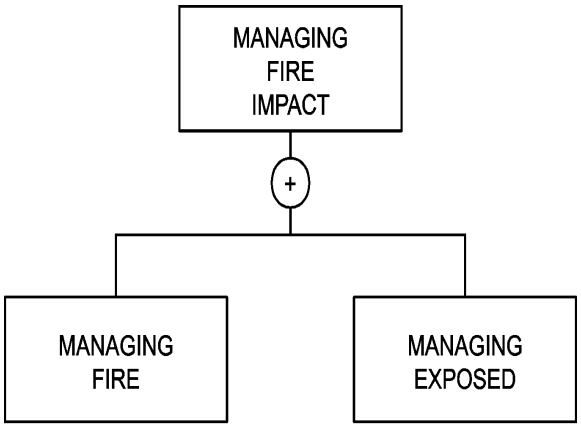


Figure 1(2)
SYSTEMS APPROACHES TO CODE COMPLIANCE

Fire Code Officials and Liability

Like all professionals, fire code officials are subject to legal action. The two most common legal actions that may be pursued against fire code officials are breach of contract lawsuits and tort claims. Tort claims, by far, are the most common lawsuits. These lawsuits allege that some damage, injury or harm (a tort) resulted from the actions of the fire code official. A successful tort claim must prove that the plaintiff was injured or harmed; that the fire code official had a legal duty or obligation to perform with respect to the plaintiff and that the cause of the plaintiff's injury was the fire code official's actions or inactions while performing these duties.

The Law of Torts includes the following:

The tort: Damages arising from the acts of fire code officials fall into two broad categories: property and personal [see Figure 1(3)]. Property torts involve the control, use, operation or ownership of personal and real property by private individuals. Personal torts involve physical, verbal or written assaults on the character, person, psyche or privacy of individuals. Such assaults or invasions may involve actual contact or threat of harm. For example, fire code officials' acts of commission may restrain business or trade activity, while acts of omission may fail to recognize that hazards need to be corrected, thus resulting in life or property losses.

Two actions dominate lawsuits filed against enforcement authorities: Most lawsuits either allege improper acts by the fire code official (acts of commission) or failure to fulfill specified or implied legal obligations (acts of omission). In the former, plaintiffs usually seek temporary or permanent relief from a fire code official's decision. In these actions, plaintiffs usually allege improper interpretation or application of the code or its intent. Other lawsuits usually allege failure to exercise a reasonable standard of care in the performance of duties of the fire code official. In either type of lawsuit, and often in the case of omissions, plaintiffs seek compensatory and even punitive damages. Infringements on constitutional protections may be, though occurring infrequently, the basis for lawsuits against fire code officials. Common constitutional issues raised in lawsuits against fire code officials include violations of the Fourth Amendment's protection against unreasonable searches and seizures, the Sixth Amendment's due process protections and the Fourteenth Amendment's equal protection provisions. First Amendment rights guaranteed under the freedom of association protections may be raised in cases involving public assembly occupancies, especially churches.

Property	Personal
Trespass	Assault and Battery
Conversion	False Arrest or Imprisonment
Nuisance	Defamation, Slander and Libel

Source: Rosenbauer, D.L., *Introduction to Fire Protection Law.*

Figure 1(3)
TYPES OF TORTS

Condition of negligence: To prevail in a tort claim action, a plaintiff must demonstrate negligence on the part of the defendant. Negligence may be simple—a failure to exercise reasonable or adequate care when performing assigned duties (commonly known as misfeasance)—or it may be gross—represented by wanton, willful, reckless or malicious disregard for public safety. Criminal activities, including dereliction (nonfeasance) or the failure to perform required assigned duties, may be cause for claims of gross negligence. Likewise, malfeasance, the willful or malicious violation of a legal duty, may constitute grossly negligent behavior. The following three elements must be proven to sustain a claim of negligence: the defendant had a duty to act, the defendant failed to exercise the required standard of care in the performance of that duty and, as a result of that failure, damage or harm was incurred by the plaintiff.

Duty to act: The code establishes few duties of the fire code official; instead, it places greatest emphasis on the responsibility of structure or premises owners and operators to perform their duties with adequate regard for public health, safety and welfare. The duties owed to the the public by the fire code official fall under the following categories: approvals, enforcement, personnel, inspections, investigations, reports and record keeping. Other duties may be assumed by fire code officials through the performance of their official duties. Recently, some courts have ruled that failure to perform timely reinspections or exhaust legal remedies against violators in fire code cases creates a special relation-

ship between the fire code official and the occupants of properties in violation of the code, especially when the occupants do not own the property and are not responsible for code compliance. Some court rulings have even implied that conducting inspections not otherwise required by the code constitutes an *ultra vires* (beyond the authority of) liability. Fire code officials should consult their jurisdiction's legal counsel to determine how these decisions, the jurisdiction's enforcement policies and the code provisions combined affect their enforcement program and jurisdictional and personal liabilities.

Standard of care: Taken together, the fire code official's duties are the basis for determining his or her standard of care. When assessing whether fire code officials have met this standard, judges and juries must determine whether they performed the required duties as reasonable, comparably trained and experienced fire code officials. Failure to meet the appropriate standard of care may be classified in three ways: nonfeasance, misfeasance and malfeasance. Nonfeasance is the failure to perform a required duty. Improper performance of a required duty constitutes misfeasance, and malicious or willful violation of a required duty is malfeasance. Of the three, misfeasance or simple negligence is the most common cause of action. The code and most tort claims either hold the government immune from specific claims of misfeasance or severely limit damage awards in such cases. For all purposes, sovereign immunity—the doctrine inherited from British common law mandating that "the King can do no wrong"—is obsolete. Similarly, courts in many states have abandoned the public duty doctrine, which states that a duty to all is a duty to no one. Holding that most code provisions and governmental regulations secure benefits for select groups, some state courts recognize that specific enforcement activities secure greater benefits for some members of the public than others. Such judicial reasoning holds that the inspector's duty applies to the individual who may be injured as a result of failure to detect a hazard or diligently pursue compliance. Moreover, this duty may include acts of omission, such as failure to perform required inspections. With courts today recognizing only limited immunity for government officials, fire code officials must become more aware of their duties and liabilities. Although tort claim acts limit damage awards, they still permit lawsuits to proceed against governmental officials and agencies to determine their responsibility for negligent acts. Claims of gross negligence arising from nonfeasance or malfeasance are less common than misfeasance actions but are predictably harder to defend. The code provides no relief from liability where the fire code official either fails to perform a required duty or acts *ultra vires*; that is, beyond his or her authority. The jurisdiction is generally immune from claims when its agents perform acts beyond the scope of their authority, unless such acts were implicitly endorsed by the government (explicit endorsement may constitute a discretionary governmental act and, similarly, immunize the government). Nonfeasance is considered a criminal offense in many jurisdictions. An employee's dereliction of duty exempts the jurisdiction from immunity under most circumstances, unless the employee's failure to perform was the direct result of explicit instructions from governmental superiors; however, the employee may be held criminally liable.

In addition to the Law of Torts, the following have an impact on fire code officials and liability:

Awards: Lawsuits may seek declarative judgments in favor of the plaintiff–injunctive relief or monetary awards. Monetary awards fall into four categories: nominal, special, compensatory and punitive. The first purpose of monetary awards should be to the claimant or plaintiff for real losses. This is the purpose of compensatory and special damages. Compensatory awards reimburse the claimant or plaintiff for the direct costs resulting from the defendant's negligence or carelessness. Many times, a plaintiff will also seek additional compensation for the indirect results of the defendant's acts. Such special damage claims may result in additional compensation beyond that provided by compensatory damages. Punitive awards are intended to punish the defendant for the misdeed and discourage him or her from future unlawful activity. These awards are often held up as examples to the community as a whole and are a way to discourage unlawful activities by others. Nominal damage awards serve to assign blame in intentional tort cases when the facts of the case do not merit a substantial settlement.

Protection: The best protection against a lawsuit is professional conduct and preparation; that is, training, education and research. Lawsuits filed against public officials have become commonplace and are probably inevitable. In 1983, H. M. Markman suggested six rules to manage legal liability [see Figure 1(4)].

- **You cannot prevent someone from filing a lawsuit against you.**
- **Do not take the lawsuit personally.**
- **Understand your risk exposure or exposures.**
- **Be professional.**
- **You are not an insurer.**
- **Do not make stupid mistakes.**

Figure 1(4)
MARKMAN'S SIX RULES

Although no single rule should be considered more important than another, the last one is perhaps the best to remember. Everyone makes mistakes, so strive to learn from the mistakes rather than repeat them. Nonetheless, every mistake may be potential exposure. Acting professionally helps minimize exposure to error, especially when training, and common sense is encouraged. Using common sense, exercising reasonable care and acting professionally are no insurance against

a lawsuit, but they all may provide considerable protection in the event a lawsuit is filed. No matter how hard someone may try to avoid a lawsuit, someone may sue. When a lawsuit is filed, the most important things to remember are not to take it personally and not to forget the other five rules.

Enforcement

The enforcement duty of the fire code official's position is composed of four distinct functions: inspection, detection, notification and reporting. All four functions define phases in the enforcement process duties of fire code officials.

During the code enforcement process, structures or premises requiring inspections are identified. Inspectors are assigned and inspections are performed. During these inspections, any code violations found are usually noted. Then, the owner or occupant is verbally advised or notified that the deficiencies noted are code violations. To promote code compliance, the inspector may suggest remedial actions that may be taken to establish compliance. Finally, a written violation notice serving as further notice to the owner or occupant is issued. The written notice also serves as a permanent record or report of the inspection.

Inspection

Inspections are careful examinations of plans or premises for the presence of fire and life safety hazards. Upon observing a hazardous condition, the fire code official begins a process directed at correcting the situation. This may be accomplished by removing or eliminating the hazardous condition or providing some countermeasure designed to lessen its effects on the property, occupants or neighbors. In the case of inspections, care should imply a systematic method that keeps the inspection process in a proper perspective and recognizes that code enforcement is limited to legal and technical means of pursuing fire safety. Achieving fire safety objectives means using a balanced approach composed of some elements seeking to prevent ignitions and others attempting to control fire effects. Fire safety objectives are not defined by the code but rather by the users. Each jurisdiction must establish what risks and costs are reasonable while pursuing fire safety.

There may be as many different methods of conducting inspections as there are inspectors, and no single method is necessarily the correct one; however, each method probably has some strong and weak points. The following three approaches can form the basis for any number of different inspection techniques.

Outside to inside: Beginning outside is not only logical but necessary. Inspectors too often neglect hazards and clues outside the building that suggest significant danger to the occupants. An inspector must ask the following question: "Do the things I see outside match those I see inside?" For example:

- Do doors identified as exits inside actually discharge outside to acceptable refuge areas or the public way?
- Are trash receptacles or other obstructions outside located so the effectiveness of exits is not reduced, or do receptacles alone pose a fire hazard?
- Does the site permit sufficient access for firefighter rescue operations and fire suppression?

Top to bottom: Once inside a structure, deciding where to start is more than a matter of preference. By beginning at the top, an inspector's job becomes easier so that any violations are searched for in all areas. One question inspectors may ask is: "If completeness is the principal criterion, why not start at the bottom and work up?" The answer to this question is that walking down stairs is easier than walking up stairs. This easier path of travel allows the inspector to concentrate more completely on the inspection itself. After performing many inspections, there will not be a need for additional exercise obtained from beginning at the bottom.

General to specific: Without constructing a detailed inspection framework, many fire code officials find it helpful to move from the general to the specific when evaluating occupancies and hazards. This helps keep the whole problem in focus while preserving attention to detail. The inspector can focus on a specific problem without losing sight of the "big picture."

Detection

Systematic inspection procedures, like those described, should aid in the detection of code violations. By keeping the premises, processes or objectives in clear focus, the inspector keeps the task in context. A systematic inspection process implies not only organization but an understanding of the entire process. Achieving fire safety objectives means understanding how structures, premises, occupants and fire interact [see Figure 1(5)]. To keep the system in balance and prevent uncontrolled fires means understanding how people use structures and premises to achieve useful and productive purposes.

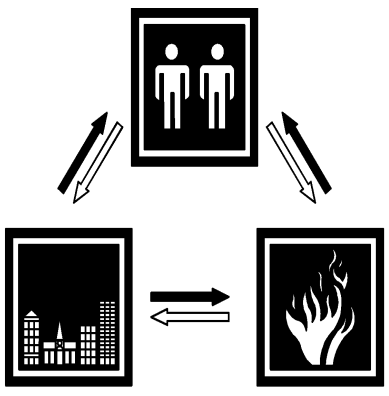


Figure 1(5)
HOW BUILDINGS, PEOPLE AND FIRE INTERACT

In such a context, a fire hazard is anything that either fails to prevent an uncontrolled fire or permits a fire to spread unchecked. Similarly, hazardous conditions are those preventing occupants from escaping or fire fighters from entering a structure and premises to control a fire.

Notification

Inspection programs cannot identify and abate all hazards. Code enforcement alone cannot secure absolute protection for people and property. Furthermore, many code requirements maintain or reinforce features not intended to prevent a fire but rather to minimize a fire's effects should one occur. Every inspection program, therefore, should consider the benefits of educating building owners and occupants about the hazards endangering their lives and property. Not only do such efforts help secure compliance with code requirements, but they are likely to secure long-term commitments to fire safety as well. Another equally apt metaphor describes the fire prevention process as the "Three E's:" engineering, education and enforcement. A balanced approach comprised of these three elements can be an especially effective way of achieving desired fire safety objectives.

Reporting

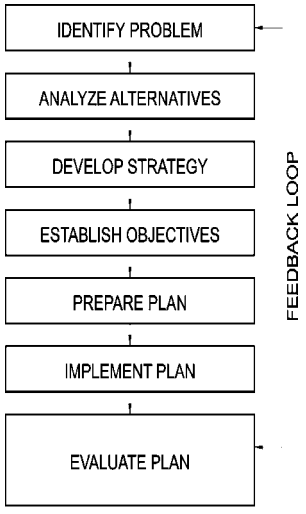
The first three elements of the code enforcement process are directed at identifying and eliminating hazards at their source. Reporting is intended to help document and reinforce the lessons learned from the previous three phases. The words, "If it's not written down, it didn't happen!" reinforce the message that reporting is just as important as any of the other three elements of the code enforcement system. Few people enjoy paperwork. Without documentation, however, prosecuting an effective code enforcement program becomes nearly impossible. Accurate, concise and timely records are essential for both legal and historical reasons. Documenting the inspection and violation history of a particular premises or owner is essential when prosecuting criminal actions under the code provisions.

Figure 1(6) illustrates a systems approach using data-generated by fire incidents and inspections to direct code enforcement, public education activities or code development. This approach is equivalent to the one typically used to make ordinary decisions about problems with many competing solutions, to plan for the future and to consider the cost and benefits of these decisions.

Understanding the code administration process and the environment influencing it allows the fire code official to be more effective. Adhering to the provisions of Chapter 1 not only minimizes the fire code official's liability, but also provides an effective code enforcement program. Just as owners and occupants have obligations under the code, so does the fire code official. Following these procedures enables him or her to identify and respond to the community's needs, thus reducing the community's fire risk.

Purpose

Chapter 1 establishes provisions to ensure that code administration and enforcement is reasonable, appropriate and fair. This chapter outlines the duties and powers of the fire code official; the scope of the fire code official's authority to enforce the code; the applicability of the document and proofs of compliance; the means of securing compliance with its provisions and procedures for protecting due process rights of applicants, owners, occupants and others affected by the code provisions and the enforcement activities of the fire code official.



❖ This system is used mostly to solve everyday problems, weigh costs and benefits of alternatives, and plan responses to problems. It is also a helpful tool for responding to fire protection problems. As an example, fire data suggest the emergence of a trend toward more fires caused by misuse of auxiliary heating appliances. Alternative solutions include:

- A public education campaign on safe use of heaters;
- A targeted inspection program to identify and correct improper heating practices in homes and businesses; or
- Doing nothing but hoping for warm weather.

The evaluation must consider a variety of complex factors and methods of measuring the success of each approach. Once an approach is selected and implemented, it must be evaluated to examine whether the desired reduction in fires occurs. If not, perhaps one of the other alternatives should be reexamined, or the problem should be redefined.

Figure 1(6)
NORMAL PLANNING APPROACH

PART 1—GENERAL PROVISIONS

SECTION 101
SCOPE AND GENERAL REQUIREMENTS

[A] 101.1 Title. These regulations shall be known as the *Fire Code* of **[NAME OF JURISDICTION]**, hereinafter referred to as "this code."

❖ This section identifies the jurisdictional applicability in legal terms. The local jurisdiction is to insert its name into this section by including a modification to the code in the adopting ordinance. This will make the code applicable to the local jurisdiction. See page ix of the code for a sample ordinance for adoption.

[A] 101.2 Scope. This code establishes regulations affecting or relating to structures, processes, premises and safeguards regarding:

1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices;
2. Conditions hazardous to life, property or public welfare in the occupancy of structures or premises;
3. Fire hazards in the structure or on the premises from occupancy or operation;
4. Matters related to the construction, extension, repair, alteration or removal of fire suppression or alarm systems; and
5. Conditions affecting the safety of fire fighters and emergency responders during emergency operations.

❖ The code does not attempt to achieve perfection by requiring every conceivable or available safeguard for every structure, premises or operation within the scope of the code; rather, the code seeks to establish a minimum acceptable safety level to balance the many factors that must be considered, including loss statistics, relative hazard and the economic and social impact. The code is maintained through the use of a democratic code development process so that everyone affected by these minimum requirements has an equal opportunity to present his or her concern, both for and against any of the requirements.

The question is often asked, "Does the code apply only to buildings and facilities, or does it cover vehicles as well?" Though the scope text does not specifically mention vehicles, vehicles are intended to be covered by the terms of "...use of...devices..." and "...use of... buildings or premises..." in Items 1 and 2 of the section. It is clear that the code specifically intends to regulate vehicles because, in some cases, there are regulations in the code that are specific to vehicles, such as those in Sections 309 and 5706. However, in most cases, unless vehicles are specifically mentioned, provisions in the code would not apply to them (see also Section 904.11).

[A] 101.2.1 Appendices. Provisions in the appendices shall not apply unless specifically adopted.

❖ The code has several appendices, which provide additional information regarding the provisions in the code and additional regulations that are available for adoption if desired by the adopting jurisdiction. If the jurisdiction decides to include any of the appendices as part of the code, each of the appendices to be adopted must be specifically listed in the adoption ordinance for the code. A sample adoption ordinance is on page ix of the code.

[A] 101.3 Intent. The purpose of this code is to establish the minimum requirements consistent with nationally recognized good practice for providing a reasonable level of life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises, and to provide safety to fire fighters and emergency responders during emergency operations.

❖ Code requirements regulate conditions that are likely to cause or contribute to fires or explosions; endanger life or property if a fire occurs or contribute to the spread of a fire. The intent of the code is to regulate conditions related to the health, safety and welfare of the public, the fire fighters and other emergency responders called upon to conduct emergency operations in or on any building, structure or premises. Note that the code requirements are minimum (see commentary, Section 101.2 for a discussion on minimum requirements).

While the code does serve as a maintenance code for buildings constructed in accordance with the IBC, it has provisions that go far beyond maintenance of construction regulations for buildings. Much of the code prescribes construction regulations of several sorts, which can be seen throughout the code in the general provisions for safety and in special occupancies, processes and equipment. These regulations supplement the construction regulations in the IBC for cases where special hazards exist.

A common question that arises is, "Is it the intent of the code to apply to noncommercial structures?" The answer to which is yes. The code applies to all structures within a jurisdiction, including residential occupancies, unless such occupancies are specifically excluded within the text of a particular code section. For example, Sections 503.1.1 and 507.1 require that all occupancies, including residential occupancies, be provided with fire apparatus access and a water supply for fire fighting. Though it is true that there are many provisions in the code that would not normally be applicable to a residential occupancy, based on the scope of the particular provision, the overall application of the code is not limited to commercial structures only (see the commentary to Section 503.1.1 and Appendix D107.1 for further discussion of this topic).

[A] 101.4 Severability. If a section, subsection, sentence, clause or phrase of this code is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

❖ All sections of the code not invalidated by legal action remain in effect. While a dispute over a particular issue (such as hazardous materials quantity limitation) may have caused litigation that resulted in the provision being found unconstitutional, the remainder of the code is still applicable.

[A] 101.5 Validity. In the event any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions hereof, which are determined to be legal; and it shall be presumed that this code would have been adopted without such illegal or invalid parts or provisions.

❖ The code provisions are intended to be construed as severable. If any part of the code is ruled invalid by a court of competent jurisdiction, the remaining sections of the code are intended to stand as though the invalid section never existed. Fire code officials and adopting bodies should carefully and promptly evaluate the impact of any such ruling on ongoing enforcement activities and the remaining code provisions. Such changes that are necessary to preserve and protect the enforcement authority of the jurisdiction and the public should be instituted through legislative action as soon as practical. Additionally, the International Code Council® (ICC®) should be advised of court actions invalidating any code provisions. For the same reason local officials must evaluate the effects of court decisions, the influence of court decisions on the remainder of the code must be evaluated for national impact as well.

SECTION 102
APPLICABILITY

[A] 102.1 Construction and design provisions. The construction and design provisions of this code shall apply to:

1. Structures, facilities and conditions arising after the adoption of this code.
2. Existing structures, facilities and conditions not legally in existence at the time of adoption of this code.
3. Existing structures, facilities and conditions when required in Chapter 11.
4. Existing structures, facilities and conditions which, in the opinion of the *fire code official*, constitute a distinct hazard to life or property.

❖ This section establishes the scope of application of the code provisions that regulate construction and design. Construction and design requirements include, but are not limited to, the installation of fire protection systems; drainage and secondary containment facilities for hazardous materials; fire-resistive construction and the activities stated in Section 105.7 for which a construction permit is required.

Item 1 specifies that the construction and design code requirements apply to new construction that occurs following the adoption of the code.

Item 2 means that the construction and design code requirements are to apply to existing structures that did not have a certificate of occupancy at the time the code was adopted. An example would be a building that was built when there was no adopted construction code in the jurisdiction.

Item 3 refers to Chapter 46, “Construction Requirements for Existing Buildings,” which was added in the 2009 edition of the code to assemble in a single location all of the construction and design code requirements that specifically target existing structures, facilities and conditions for retroactive application, which had previously been scattered throughout the code.

Item 4 generally requires the fire code official to determine that a “distinct hazard to life or property” exists prior to enforcing a construction and design code provision retroactively. Simply claiming that a violation exists because a building does not comply with the most recent edition of the code does not necessarily establish that a hazard actually exists. The fire code official should be prepared to demonstrate, based on evidence or case histories that would be defensible in a court of law, that a distinct hazard exists. This would be especially true where enforcement would result in substantial expense to the property owner or when a building has remained in compliance with the edition of the code under which it was originally constructed.

Furthermore, legal counsel should be consulted prior to the retroactive application of the code in order to establish the defensibility of the fire code official’s determination in a court of law. Also, similar occupancies in the jurisdiction should be treated equally using a written policy to avoid the possibility of charges of selective enforcement.

[A] 102.2 Administrative, operational and maintenance provisions. The administrative, operational and maintenance provisions of this code shall apply to:

1. Conditions and operations arising after the adoption of this code.
2. Existing conditions and operations.

❖ This section specifies that the administrative, operational and maintenance requirements of the code apply to conditions and operations that exist when the code is adopted and new conditions and operations that begin after the code is adopted. Although Sections 102.1 and 102.2 are the controlling sections for retroactive application of the code to existing buildings, they do not provide for retroactive code application solely on the basis of a change in ownership or the occupying tenant. If a change in the occupancy group or the character of use occurs, the current edition of the code becomes enforceable. In such cases, Section 102.3 also applies.

[A] 102.3 Change of use or occupancy. No change shall be made in the use or occupancy of any structure that would place the structure in a different division of the same group or occupancy or in a different group of occupancies, unless such structure is made to comply with the requirements of this code and the *International Building Code*. Subject to the approval of the *fire code official*, the use or occupancy of an existing structure shall be allowed to be changed and the structure is allowed to be occupied for purposes in other groups without conforming to all of the requirements of this code and the *International Building Code* for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

❖ A change in occupancy in an existing structure may change the level of inherent hazards that the code was initially intended to address.

Regardless of whether the change is to an occupancy considered to be more or less hazardous, this section applies the provisions of the IBC for new construction to the existing structure with the new occupancy to match the specific requirements of the code to the specific hazards of the new occupancy. For example, a change from an existing Group M mercantile occupancy to a Group B business occupancy renders all Group B provisions applicable to all portions of the structure where the occupancy has changed, or that are adversely affected by the change.

[A] 102.4 Application of building code. The design and construction of new structures shall comply with the *International Building Code*, and any *alterations*, additions, changes in use or changes in structures required by this code, which are within the scope of the *International Building Code*, shall be made in accordance therewith.

❖ The code is the companion fire and life safety maintenance code to the IBC. Maintenance of other building features is governed by other *International Codes*® (I-Codes®). When existing buildings change occupancy group or are altered, increased in area or demolished, the IBC provisions must apply. When compliance with the code requires alterations, additions or modifications within the scope of the IBC, the IBC regulations and the building official's authority must prevail. This makes it essential that the code officials responsible for enforcing the building and fire codes establish a sound working relationship. Clear communication is essential to achieve compliance with the respective code official's orders.

[A] 102.5 Application of residential code. Where structures are designed and constructed in accordance with the *International Residential Code*, the provisions of this code shall apply as follows:

1. Construction and design provisions: Provisions of this code pertaining to the exterior of the structure shall apply including, but not limited to, premises identification, fire apparatus access and water supplies. Where interior or exterior systems or devices are installed, construction permits required by Section 105.7 of this code shall also apply.
2. Administrative, operational and maintenance provisions: All such provisions of this code shall apply.

❖ This section clarifies the extent to which the *International Residential Code*® (IRC®) and the code are interrelated and how the provisions of the code apply to the development of one- and two-family dwelling projects built under the IRC.

The IRC is designed and intended for use as a stand-alone code for the construction of detached one- and two-family dwellings and townhouses not more than three stories in height. As such, the construction of detached one- and two-family dwellings and townhouses is regulated exclusively by the IRC and not subject to the provisions of any other I-Codes other than to the extent specifically referenced. Although the IRC regulates the construction of detached one- and two-family dwellings and townhouse structures, it does not contain provisions to regulate the design and construction of emergency access to and community fire protection for residential developments within which such dwelling structures are constructed. Accordingly, where the code is adopted, the design, construction, regulation and maintenance of fire apparatus access roads for servicing such residential developments must comply with the provisions of Section 503 and, if adopted, Appendix D. Also, the design, construction, regulation and maintenance of fire protection water supplies for servicing such residential developments must comply with the provisions of Section 508 and, if adopted, Appendices B and C. These specific requirements of the code are applicable because they include design and construction regulations that provide necessary emergency access and community fire protection for residential developments containing structures that are regulated within the scope of the IRC.

[A] 102.6 Historic buildings. The provisions of this code relating to the construction, *alteration*, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings when such buildings or structures do not constitute a distinct hazard to life or property. Fire protection in designated historic buildings and structures shall be provided in accordance with an *approved* fire protection plan.

❖ This section provides a blanket exception from code requirements when the building in question has historic value. The most important criterion for application of this section is that the building must be recognized by a qualified party or agency as having historic significance. Usually this is done by a state or local authority after considerable scrutiny of the historical value of the building. Most, if not all, states have such authorities, as do many local jurisdictions.

The agencies with such authority can be located at the state or local government level or through the local chapter of the American Institute of Architects (AIA).

[A] 102.7 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 80, and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.7.1 and 102.7.2.

❖ The use of referenced codes and standards to cover certain aspects of various occupancies and operations rather than write parallel or competing requirements into the code is a long-standing and successful code development principle. Often, however, questions and potential conflicts in the use of referenced codes and standards can arise which can lead to inconsistent enforcement of the code. This section establishes the relationship between the code and the codes or standards that it references. A referenced code or standard or portion thereof is to be considered an enforceable extension of the code as if the specified content of the referenced code or standard were included in the body of the code. The extent to which the provisions of a referenced standard may be enforced is limited to those portions of the standard that are specifically identified in the code section that makes the reference. As an example of such limiting references, in regard to Chapter 57, "Flammable and Combustible Liquids," the question has been posed as to whether the entire referenced standard, NFPA 30, is applicable since it is referenced 30 times in Chapter 57. The answer is no. The applicability of NFPA 30 content would be limited to only the specific content indicated in the code section making the reference, e.g., Section 5703.6.2 limits the applicable NFPA 30 content to only Chapter 27 of that document; Section 5704.2.7 limits the applicable NFPA 30 content to only the tank design, fabrication and construction provisions of Chapters 21 and 22 or 23 of that document, and various other code sections such as 5704.2.7.8 and 5704.2.7.9 limit the reference to specifically enumerated sections of NFPA 30.

[A] 102.7.1 Conflicts. Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

❖ Where a code section referencing a standard contains no content limitation, any applicable provisions of the standard may be applied to the extent that they do not conflict with similar provisions in the code or other I-Codes. See the commentary to Section 102.7.2 for further discussion of conflicting provisions.

[A] 102.7.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

❖ This new section expands upon the provisions of Section 102.7.1 by making it clear that, even if a referenced standard contains requirements that parallel the code (or the other referenced I-Codes) in the standards own duly referenced section(s), the provisions of the code (or the other referenced I-Codes) will always take precedence. One of the most common examples of such conflicting provisions is that many referenced standards contain building construction requirements that may differ from the requirements of the IBC whose applicability is established in Section 102.4 of the code. In such cases, the IBC would supercede the standard.

[A] 102.8 Subjects not regulated by this code. Where no applicable standards or requirements are set forth in this code, or are contained within other laws, codes, regulations, ordinances or bylaws adopted by the jurisdiction, compliance with applicable standards of the National Fire Protection Association or other nationally recognized fire safety standards, as *approved*, shall be deemed as prima facie evidence of compliance with the intent of this code. Nothing herein shall derogate from the authority of the *fire code official* to determine compliance with codes or standards for those activities or installations within the *fire code official's* jurisdiction or responsibility.

❖ This section provides guidance for situations in which no specific standard is designated in the code or otherwise adopted by the jurisdiction. In this instance, compliance with the requirements of a standard of the NFPA or other nationally recognized standards can be approved by the fire code official.

[A] 102.9 Matters not provided for. Requirements that are essential for the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, which are not specifically provided for by this code, shall be determined by the *fire code official*.

❖ Evolving technology in our society will sometimes result in a situation or circumstance that the code does not cover. The reasonable application of the code to such hazardous, unforeseen conditions is provided in this section. Clearly, such a section is needed and the fire code official's experience and judgment must be used. The section, however, does not override requirements that may be preferred when the code provides alternative methods. Additionally, the section can be used to implement the general performance-oriented language of the code in specific enforcement situations.

[A] 102.10 Conflicting provisions. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in a specific case, different sections of this code specify different

materials, methods of construction or other requirements, the most restrictive shall govern.

❖ The provisions of this section provide guidance to both fire code officials and other code users on the application of the code when different sections specify different materials, methods of construction or other requirements.

The importance of this section should not be understated. It resolves the question of how to handle conflicts between the general and specific provisions found in the code or those instances where different sections specify different requirements. This section provides a necessary hierarchy for application of code provisions and clarifies code applications that would otherwise leave persistent questions and lead to debate. The code requires that where different sections of the code apply but contain different requirements, the most restrictive provisions shall govern. The code also resolves conflicts between the general requirements of any particular issue with any specific requirements of the same issue by indicating that the specific requirements take precedence over the general requirements.

[A] 102.11 Other laws. The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

❖ Compliance with the requirements of the code does not entail authorization, approval or permission to violate the regulations of other local, state or federal laws. Other laws, ordinances and regulations not regulated or enforced by the fire code official could be in existence and enforced by another authority having jurisdiction over those provisions. Although the requirements may have similar provisions to those of the code, the work must be in conformance with the other regulations.

[A] 102.12 Application of references. References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.

❖ There are many instances in the code where a reference is merely a chapter number, section number, or in some cases, a provision not specified by number. In all such situations, these references are to the content of the code and not some other code or publication.

PART 2—ADMINISTRATIVE PROVISIONS

SECTION 103
DEPARTMENT OF FIRE PREVENTION

[A] 103.1 General. The department of fire prevention is established within the jurisdiction under the direction of the *fire code official.* The function of the department shall be the implementation, administration and enforcement of the provisions of this code.

❖ The traditional enforcement agency for the code is the fire department or fire prevention bureau of a state, county or municipal government. Such agencies usually perform administrative functions and provide public safety services related to fire protection; however, a variety of less traditional arrangements have also been used to enforce the code, including private corporations, such as fire districts and fire companies employed by a local government to act as its agent; police and other law enforcement agencies; building, housing or zoning authorities and community and economic development departments. Regardless of who is designated by the legislative or administrative authority to adopt and enforce the code, this section establishes the legal duty of the fire code official to enforce the code.

[A] 103.2 Appointment. The *fire code official* shall be appointed by the chief appointing authority of the jurisdiction; and the *fire code official* shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the appointing authority.

❖ A fire code official's independence is essential so that public safety decisions are not based on political, economic or social expediencies. This is not to say that social, political and economic considerations should not weigh in when deciding some code questions, but the interests of public health, safety and welfare must not be compromised to achieve such objectives. Protection of officials from removal from office without cause helps ensure that reasonable and competent professionals will be willing to serve.

[A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the *fire code official* shall have the authority to appoint a deputy *fire code official,* other related technical officers, inspectors and other employees.

❖ Most jurisdictions require more than one official to enforce the code. With the technical and legal demands on code enforcers increasing, additional personnel will certainly be required in this area to serve adequately the public interest. Though the professional qualifications of fire code officials are not detailed in the code, individuals appointed to code enforcement positions should be technically competent, motivated, well-adapted and possess good written and oral communication skills.

Many jurisdictions find it helpful, if not essential, to appoint an individual who is second-in-command and who would assume leadership of the organization in the absence of the chief code enforcement official.

[A] 103.4 Liability. The *fire code official,* member of the board of appeals, officer or employee charged with the enforcement of this code, while acting for the jurisdiction, in

good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.

❖ The fire code official, other department employees and members of the appeals board are not intended to be held liable for those actions performed in accordance with the code in a reasonable and lawful manner. However, the responsibility of the fire code official in this regard is subject to local, state and federal laws that may supersede this provision. This section further establishes that fire code officials (or subordinates) must not be liable for costs in any legal action instituted in response to the performance of lawful duties. Section 103.4.1 states that those costs are to be borne by the state, county or municipality, as applicable. The best way to be certain that the fire code official's action is a "lawful duty" is always to cite the applicable code section on which the enforcement action is based.

[A] 103.4.1 Legal defense. Any suit instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representative of the jurisdiction until the final termination of the proceedings. The *fire code official* or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code; and any officer of the department of fire prevention, acting in good faith and without malice, shall be free from liability for acts performed under any of its provisions or by reason of any act or omission in the performance of official duties in connection therewith.

❖ Section 103.4 establishes that fire code officials or subordinates must not be liable for costs in any legal action in response to the performance of lawful duties. This section states that these costs must be borne by the state or municipality. The best way to be certain that the fire code official's action is a lawful duty is to always cite the applicable code section substantiating the action.

SECTION 104
GENERAL AUTHORITY AND RESPONSIBILITIES

[A] 104.1 General. The *fire code official* is hereby authorized to enforce the provisions of this code and shall have the authority to render interpretations of this code, and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions. Such interpretations, policies, procedures, rules and regulations shall be in compliance with the intent and purpose of this code and shall not have the effect of waiving requirements specifically provided for in this code.

❖ The duty of the fire code official is to enforce the code. Because the fire code official must also act on all questions related to this responsibility, except as specifically exempted by statutory requirements or elsewhere in the code, the fire code official is the "authority having jurisdiction" for all matters relating to the code and its enforcement.

This section also gives the fire code official interpretation authority. Note, however, that the interpretations are to be consistent with the intent and purpose of the code and are not allowed to set aside any specific requirement in the code.

[A] 104.2 Applications and permits. The *fire code official* is authorized to receive applications, review *construction documents* and issue permits for construction regulated by this code, issue permits for operations regulated by this code, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

❖ The fire code official is obligated to receive, review and act on permit applications required by the code as detailed in Section 105. All permitted premises must be inspected either before or after the permit is issued to determine compliance with the code provisions and terms of the permit.

[A] 104.3 Right of entry. Whenever it is necessary to make an inspection to enforce the provisions of this code, or whenever the *fire code official* has reasonable cause to believe that there exists in a building or upon any premises any conditions or violations of this code which make the building or premises unsafe, dangerous or hazardous, the *fire code official* shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed upon the *fire code official* by this code. If such building or premises is occupied, the *fire code official* shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the *fire code official* shall first make a reasonable effort to locate the *owner* or other person having charge or control of the building or premises and request entry. If entry is refused, the *fire code official* has recourse to every remedy provided by law to secure entry.

❖ This section establishes the right of the fire code official to enter the premises to make the permit inspections required by Section 105.2.2. Permit application forms typically include a statement in the certification signed by the applicant (who is the owner or owner's agent) granting the fire code official the authority to enter areas covered by the permit to enforce related code provisions.

The right to enter other structures or premises is more limited. First, to protect the right of privacy, the owner or occupant must grant the building official permission before an interior inspection of the property can be conducted. Permission is not required for inspections that can be accomplished from within the public right-of-way. Second, such access may be denied by the owner or occupant. Unless the inspector has reasonable cause to believe that a violation of the code exists, access may be unattainable. Third, fire code officials must present proper identification (see Section 104.4) and request admittance during

reasonable hours—usually the normal business hours of the establishment—to be admitted. Fourth, inspections must be aimed at securing or determining compliance with the provisions and intent of the regulations that are specifically within the established scope of the fire code official's authority.

Searches to gather information for the purpose of enforcing other codes, ordinances or regulations are considered unreasonable and are prohibited by the Fourth Amendment to the U.S. Constitution. "Reasonable cause" in the context of this section must be distinguished from "probable cause," which is required to gain access to property in criminal cases. The burden of proof establishing reasonable cause may vary among jurisdictions. Usually, an inspector must show that the property is subject to inspection under the provisions of the code; that the interests of the public health, safety and welfare outweigh the individual's right to maintain privacy and that such an inspection is required solely to determine compliance with the provisions of the code.

Many jurisdictions do not recognize the concept of an administrative warrant and may require the fire code official to prove probable cause in order to gain access upon refusal. This burden of proof is usually more substantial, often requiring the fire code official to stipulate in advance why access is needed (usually access is restricted to gathering evidence for seeking an indictment or making an arrest); what specific items or information is sought; its relevance to the case against the individual subject; how knowledge of the relevance of the information or items sought was obtained; and how the evidence sought will be used. In all such cases, the right to privacy must always be weighed against the right of the fire code official to conduct an inspection to verify that public health, safety and welfare are not in jeopardy. Such important and complex constitutional issues should be discussed with the jurisdiction's legal counsel. Jurisdictions should establish procedures for securing the necessary court orders when an inspection is deemed necessary following a refusal.

[A] 104.3.1 Warrant. When the *fire code official* has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an *owner* or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the *fire code official* for the purpose of inspection and examination pursuant to this code.

❖ Very simply, the requirements in this section specify that when the fire code official has obtained a warrant to inspect the property, the owner or occupant is to allow the fire code official entry to do the inspection (see commentary, Section 104.3).

[A] 104.4 Identification. The *fire code official* shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

❖ This section requires the fire code official (including, by definition, all authorized designees) to carry appropriate official identification in the course of conducting the duties of the position. Such official identification may take the form of a badge, an identification card or both and removes any question as to the purpose and authority of the inspector.

[A] 104.5 Notices and orders. The *fire code official* is authorized to issue such notices or orders as are required to affect compliance with this code in accordance with Sections 109.1 and 109.2.

❖ The fire code official is required to issue orders to abate illegal or hazardous conditions and to pursue correction or abatement of hazardous conditions by issuing legal notices and orders as described by the code. Courts are increasingly ruling that failure to follow up and pursue appropriate legal remedies promptly exposes both the fire code official and the jurisdiction to a liability in tort.

[A] 104.6 Official records. The *fire code official* shall keep official records as required by Sections 104.6.1 through 104.6.4. Such official records shall be retained for not less than five years or for as long as the structure or activity to which such records relate remains in existence, unless otherwise provided by other regulations.

❖ In keeping with the need for an efficiently conducted business practice, the fire code official must keep official records. Such documentation provides a valuable resource of information if questions arise throughout the life of the building and its occupants. The code requires that the construction documents be kept until the project is complete or for at least five years, whichever is longer.

[A] 104.6.1 Approvals. A record of approvals shall be maintained by the *fire code official* and shall be available for public inspection during business hours in accordance with applicable laws.

❖ Records of prior approvals may be needed to determine the status of an existing operation or for future validation of a specific condition.

[A] 104.6.2 Inspections. The *fire code official* shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

❖ Records of inspections are needed to support the issuance of a certificate of occupancy. The inspection records should document any code violations that were subsequently corrected.

[A] 104.6.3 Fire records. The fire department shall keep a record of fires occurring within its jurisdiction and of facts

concerning the same, including statistics as to the extent of such fires and the damage caused thereby, together with other information as required by the *fire code official*.

❖ Fire records provide a history of the fire experience of a facility and a cumulative record for all of the facilities of a jurisdiction. Fire records support consideration for construction code requirements based on the need to prevent additional fire occurrences.

[A] 104.6.4 Administrative. Application for modification, alternative methods or materials and the final decision of the *fire code official* shall be in writing and shall be officially recorded in the permanent records of the *fire code official*.

❖ The written approval of modifications or alternative materials and methods of construction or operation are needed to support the approval of these items in the future. This file could be used to verify that an existing condition had been previously approved.

[A] 104.7 Approved materials and equipment. All materials, equipment and devices *approved* by the *fire code official* shall be constructed and installed in accordance with such approval.

❖ The code is a compilation of criteria with which materials, equipment, devices and systems must comply to be acceptable for a particular application. The fire code official has a duty to evaluate such materials, equipment, devices and systems for code compliance and, when compliance is determined, approve them for use. As a result of this approval, the material, equipment, device or system must be constructed and installed in compliance with that approval, and with all the conditions and limitations considered as a basis for that approval. For example, the manufacturer's instructions and recommendations are to be followed if the approval of the material was based, even in part, on those instructions and recommendations.

The approval authority given to the fire code official is a significant responsibility and is a key to code compliance. The approval process is first technical and then administrative and must be approached that way. For example, if data to determine code compliance are required, such data should be in the form of test reports or engineering analysis—not simply taken from a sales brochure.

[A] 104.7.1 Material and equipment reuse. Materials, equipment and devices shall not be reused or reinstalled unless such elements have been reconditioned, tested and placed in good and proper working condition and *approved*.

❖ Used materials, equipment and devices are considered to have completed their life span; however, adequate substitutes are occasionally not available for existing items that have become obsolete but still serve a useful and practical purpose. In such cases, existing used equipment should be approved, provided the application is consistent with the purpose for which the equipment was designed, the function is the same as the "new" item, if one were available, and the intended use can be demonstrated as not compromising the public's safety.

[A] 104.7.2 Technical assistance. To determine the acceptability of technologies, processes, products, facilities, materials and uses attending the design, operation or use of a building or premises subject to inspection by the *fire code official*, the *fire code official* is authorized to require the *owner* or agent to provide, without charge to the jurisdiction, a technical opinion and report. The opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the *fire code official* and shall analyze the fire safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to recommend necessary changes. The *fire code official* is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

❖ No one person has the technical knowledge to evaluate all of the various operations and uses from a safety standpoint. This section provides the fire code official the authority to require the owner to provide a technical opinion safety report. The report is to be prepared by parties that have the technical ability to evaluate the design of the facility or the operational process in question. A registered design professional is commonly used for these services. It is critical that the preparer of the report have the proper background and experience for the project since the credibility of the report depends on these qualifications.

[A] 104.8 Modifications. Whenever there are practical difficulties involved in carrying out the provisions of this code, the *fire code official* shall have the authority to grant modifications for individual cases, provided the *fire code official* shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the files of the department of fire prevention.

❖ The fire code official may amend or make exceptions to the code as needed to respond to "practical difficulties" in work on new or existing buildings. Consideration of a particular difficulty is to be based on the application of the owner and a demonstration that the intent of the code is satisfied. This section is not intended to allow a code provision to be set aside or ignored; rather, it is intended to provide for the acceptance of equivalent protection. Such modifications do not, however, extend to actions that are necessary to correct violations of the code. In other words, a code violation or the expense of correcting a code violation cannot constitute a practical difficulty.

Comprehensive written records are an essential part of an effective administrative system. Unless clearly written records of the considerations and documentation used in the modification process are created and maintained, subsequent enforcement action cannot be supported.

[A] 104.9 Alternative materials and methods. The provisions of this code are not intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. The *fire code official* is authorized to approve an alternative material or method of construction where the *fire code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, *fire resistance*, durability and safety.

❖ Performance requirements have replaced detailed specifications to permit ready substitution and integration of new technologies in the marketplace. The code is not intended to restrict or prevent the development or application of new technologies or applications of existing technologies, provided they meet the intent of the code to protect public health, safety and welfare. When new methods or materials are developed, they should be evaluated.

The fire code official has the authority to recognize alternative and equivalent methods and materials, provided they maintain the level of protection required by the code. One of the most frequent criticisms of codes is that their provisions apply too broadly to classes of occupancies and, therefore, are incapable of recognizing the inherent dissimilarities within occupancy groups. While some criticism may be justified, it is the fire code official's duty to evaluate scrupulously the conditions in each case, as well as judge whether the intent of the code (to provide the minimum acceptable level of protection to life and property) is met. Fire code officials should, therefore, be prepared to use decision aids, the appeal process and outside experts as needed to show that code requirements are met.

[A] 104.9.1 Research reports. Supporting data, when necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

❖ When an alternative material or method is proposed for construction, it is incumbent upon the fire code official to determine whether the alternative is, in fact, equivalent to the methods prescribed by the code. Reports providing evidence of this equivalency are required to be supplied by an approved source, meaning a source that the fire code official finds to be reliable and accurate. The ICC Evaluation Service (ICC-ES) is an example of an agency that provides research reports for alternative materials and methods.

[A] 104.9.2 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *fire code official* shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *fire code official* shall approve the testing procedures. Tests shall be performed by an *approved* agency. Reports of such tests shall be retained by the *fire code official* for the period required for retention of public records.

❖ To provide the basis on which the fire code official can make a decision regarding an alternative material or method, sufficient technical data, test reports and documentation must be provided for evaluation. If evidence satisfactory to the fire code official indicates that the alternative material or construction method is equivalent to that required by the code, he or she may approve it. Any such approval cannot have the effect of waiving any requirements of the code. The burden of proof of equivalence lies with the applicant who proposes the use of alternative materials or methods.

The fire code official must require the submission of any appropriate information and data to assist in the determination of equivalency. This information must be submitted before a permit can be issued. The type of information required includes test data in accordance with referenced standards, evidence of compliance with the referenced standard specifications and design calculations. A research report issued by an authoritative agency is particularly useful in providing the fire code official with the technical basis for evaluation and approval of new and innovative materials and methods of construction. The use of authoritative research reports can greatly assist the fire code official by reducing the time-consuming engineering analysis necessary to review these materials and methods. Failure to substantiate adequately a request for the use of an alternative is a valid reason for the building official to deny a request. Any tests submitted in support of an application must have been performed by an agency approved by the fire code official based on evidence that the agency has the technical expertise, test equipment and quality assurance to properly conduct and report the necessary testing. The test reports submitted to the fire code official must be retained in accordance with the requirements of Section 104.6.

[A] 104.10 Fire investigations. The *fire code official*, the fire department or other responsible authority shall have the authority to investigate the cause, origin and circumstances of any fire, explosion or other hazardous condition. Information that could be related to trade secrets or processes shall not be made part of the public record, except as directed by a court of law.

❖ The prompt and thorough investigation of fires is important for many reasons, not the least of which is the identification of incendiary fires and prosecution of arsonists. In such cases, the duty of the fire code official is clear—evidence must be preserved and leads pursued through criminal prosecution, if possible. However, a more important and frequently overlooked aspect of fire investigation is loss analysis.

Whether or not the fire code official has jurisdiction to investigate incendiary fires and prosecute arsonists, it is extremely important that the enforcement agency be involved in the process of determining why fires occur; what can be done to prevent fires; how their effects can be lessened and how persons behave once fires occur. The valuable lessons learned from past tragedies have forged a relationship among the various code organizations across the country.

[A] 104.10.1 Assistance from other agencies. Police and other enforcement agencies shall have authority to render necessary assistance in the investigation of fires when requested to do so.

❖ When needed, the fire code official has the authority to ask for assistance from the police department or other enforcement agencies, such as fire code officials in nearby jurisdictions, to investigate fires.

[A] 104.11 Authority at fires and other emergencies. The fire chief or officer of the fire department in charge at the scene of a fire or other emergency involving the protection of life or property, or any part thereof, shall have the authority to direct such operation as necessary to extinguish or control any fire, perform any rescue operation, investigate the existence of suspected or reported fires, gas leaks or other hazardous conditions or situations, or take any other action necessary in the reasonable performance of duty. In the exercise of such power, the fire chief is authorized to prohibit any person, vehicle, vessel or thing from approaching the scene, and is authorized to remove, or cause to be removed or kept away from the scene, any vehicle, vessel or thing which could impede or interfere with the operations of the fire department and, in the judgment of the fire chief, any person not actually and usefully employed in the extinguishing of such fire or in the preservation of property in the vicinity thereof.

❖ This section describes the specific conditions of authority that are granted to the fire code official at a fire or other emergencies. The first half of the paragraph simply describes the fire code official's authority to carry out the fire operation at the site. The fire code official also needs to be able to control who and what is allowed to be at the site so that emergency operations are not hampered.

[A] 104.11.1 Barricades. The fire chief or officer of the fire department in charge at the scene of an emergency is authorized to place ropes, guards, barricades or other obstructions across any street, alley, place or private property in the vicinity of such operation so as to prevent accidents or interference with the lawful efforts of the fire department to manage and control the situation and to handle fire apparatus.

❖ This section gives the fire code official the authority to control access to the emergency site so that fire-fighting operations can occur without interference. This authority is also addressed in Section 104.11.

[A] 104.11.2 Obstructing operations. No person shall obstruct the operations of the fire department in connection with extinguishment or control of any fire, or actions relative to other emergencies, or disobey any lawful command of the fire chief or officer of the fire department in charge of the emergency, or any part thereof, or any lawful order of a police officer assisting the fire department.

❖ This section requires that the fire department operations not be obstructed and that directions from the fire department official in command at the emergency site be carried out. This is necessary for efficient emergency operations.

[A] 104.11.3 Systems and devices. No person shall render a system or device inoperative during an emergency unless by direction of the fire chief or fire department official in charge of the incident.

❖ This section is an extension of the requirements in Section 104.11. The fire department official is in complete charge of the fire-fighting operation at the site. No person is to tamper with the equipment needed for the emergency.

SECTION 105
PERMITS

[A] 105.1 General. Permits shall be in accordance with Sections 105.1.1 through 105.7.16.

❖ This section includes the regulations covering permits including a comprehensive list of the kinds of activities that require permits.

[A] 105.1.1 Permits required. Any property owner or authorized agent who intends to conduct an operation or business, or install or modify systems and equipment which is regulated by this code, or to cause any such work to be done, shall first make application to the *fire code official* and obtain the required permit.

❖ This section identifies that the property owner or an authorized owner's agent is required to make application and obtain a permit. It is important that the owner or the authorized agent performs this function so that they are aware and give consent for the issued permits which may include hazardous materials which could pollute or contaminate the property. See the commentary for permit fees (Section 113.1) and keeping permits on the premises and available for inspection (Section 105.3.5).

[A] 105.1.2 Types of permits. There shall be two types of permits as follows:

1. Operational permit. An operational permit allows the applicant to conduct an operation or a business for which a permit is required by Section 105.6 for either:

   1.1. A prescribed period.

   1.2. Until renewed or revoked.

2. Construction permit. A construction permit allows the applicant to install or modify systems and equipment for which a permit is required by Section 105.7.

❖ The types of activities that require an operational permit are listed in Section 105.6. Construction activities that require a permit are listed in Section 105.7.

[A] 105.1.3 Multiple permits for the same location. When more than one permit is required for the same location, the *fire code official* is authorized to consolidate such permits into a single permit provided that each provision is listed in the permit.

❖ The code allows for a number of activities to be included on a single permit in order to decrease the paperwork for all concerned. In this instance, the permit must list in detail the activities that are covered by the combined permit.

[A] 105.2 Application. Application for a permit required by this code shall be made to the *fire code official* in such form and detail as prescribed by the *fire code official*. Applications for permits shall be accompanied by such plans as prescribed by the *fire code official*.

❖ Applications provided by the jurisdiction should be complete, concise and relevant. Though the burden of proof is on the applicant to supply all necessary information to determine compliance with the code provisions, it is the fire code official's duty to request sufficient information to make a reasonable and informed judgment prior to approving a permit.

[A] 105.2.1 Refusal to issue permit. If the application for a permit describes a use that does not conform to the requirements of this code and other pertinent laws and ordinances, the *fire code official* shall not issue a permit, but shall return the application to the applicant with the refusal to issue such permit. Such refusal shall, when requested, be in writing and shall contain the reasons for refusal.

❖ This section directs the fire code official not to issue a permit if the application describes a use that does not conform to the requirements of the code. Note that this direction is not advisory. The fire code official would be in violation of the code if a permit were issued in such circumstances.

[A] 105.2.2 Inspection authorized. Before a new operational permit is *approved*, the *fire code official* is authorized to inspect the receptacles, vehicles, buildings, devices, premises, storage spaces or areas to be used to determine compliance with this code or any operational constraints required.

❖ The inspections described in this section are necessary for the fire code official to determine that the application for an operational permit complies with the code prior to issuing that permit. Operations may not proceed without an operational permit.

[A] 105.2.3 Time limitation of application. An application for a permit for any proposed work or operation shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been diligently prosecuted or a permit shall have been issued; except that the *fire code official* is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

❖ Permit applications lingering indefinitely in an incomplete condition can be an administrative nuisance to the fire code official, while also overburdening the filing system. This section establishes 180 days as the time limit for the permit applicant to provide the fire code official with sufficient information to evaluate the application and take appropriate action. 180 days should normally be more than enough time for an applicant to satisfy code requirements for submittal of construction documents and all other required information.

There may be circumstances, however, that could cause an application to age beyond 180 days prior to permit issuance, such as awaiting issuance of a report by a quality assurance agency. If the fire code official is satisfied that every effort is being made by the applicant to pursue the application, an extension of time would be acceptable.

[A] 105.2.4 Action on application. The *fire code official* shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the *construction documents* do not conform to the requirements of pertinent laws, the *fire code official* shall reject such application in writing, stating the reasons therefor. If the *fire code official* is satisfied that the proposed work or operation conforms to the requirements of this code and laws and ordinances applicable thereto, the *fire code official* shall issue a permit therefor as soon as practicable.

❖ While the fire code official has the duty to take all necessary and prudent actions to determine the applicant's compliance with the code, the evaluation must be completed promptly. Once the fire code official's review of the application is complete, either a permit will be issued or a written disapproval notice will be given. The disapproval notice must outline the reasons for rejection and should include a list of applicable code sections with which the applicant must comply to obtain approval.

[A] 105.3 Conditions of a permit. A permit shall constitute permission to maintain, store or handle materials; or to conduct processes which produce conditions hazardous to life or property; or to install equipment utilized in connection with such activities; or to install or modify any *fire protection system* or equipment or any other construction, equipment installation or modification in accordance with the provisions of this code where a permit is required by Section 105.6 or 105.7. Such permission shall not be construed as authority to violate, cancel or set aside any of the provisions of this code or other applicable regulations or laws of the jurisdiction.

❖ In effect, a permit is a contract or covenant between the jurisdiction and the applicant, allowing the applicant to operate, perform, conduct or direct a hazardous operation, process or occupancy. As with all contracts, the terms remain binding for a finite period. This process allows continual review of the applicant's compliance with the contract's terms. Failure to meet the terms of the contract may result in the applicant's forfeiture of the right to conduct or operate the process, operation or occupancy, and subsequently the fire code official may revoke the permit without further notice.

This section also states the fundamental premise that the permit is only a license to proceed with the work. It is not a license to violate, cancel or set aside any provisions of the code. This is significant because even if there are errors or oversights in the permit approval process, the permit applicant, not the fire code official, is responsible for code compliance.

[A] 105.3.1 Expiration. An operational permit shall remain in effect until reissued, renewed or revoked, or for such a period of time as specified in the permit. Construction permits shall automatically become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Before such work recommences, a new permit shall be first obtained and the fee to recommence work, if any, shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year. Permits are not transferable and any change in occupancy, operation, tenancy or ownership shall require that a new permit be issued.

❖ A construction permit is invalid when 180 days go by without any of the authorized work being done. The permit holder should be notified in writing that the permit is invalid, including the reasons why.

Permits are neither transferable nor assignable because they are agreements between two specific parties: the fire code official, who is acting for the jurisdiction, and the applicant. Any changes amending the application or terms of the original agreement will require a new application and permit approval.

[A] 105.3.2 Extensions. A permittee holding an unexpired permit shall have the right to apply for an extension of the time within which the permittee will commence work under that permit when work is unable to be commenced within the time required by this section for good and satisfactory reasons. The *fire code official* is authorized to grant, in writing, one or more extensions of the time period of a permit for periods of not more than 180 days each. Such extensions shall be requested by the permit holder in writing and justifiable cause demonstrated.

❖ The significant issue in this section is that an extension of time is to be granted when justifiable cause is demonstrated by the permit applicant. For example, a construction permit might be granted for certain equipment installation, but the equipment might not be received at the site until after the installation permit expires. To get a time extension, the applicant is to submit a request in writing to the fire code official, including a written explanation of why the work did not proceed within the permit time frame.

[A] 105.3.3 Occupancy prohibited before approval. The building or structure shall not be occupied prior to the *fire code official* issuing a permit and conducting associated inspections indicating the applicable provisions of this code have been met.

❖ The owner of an existing structure may request that the fire code official issue a certificate of occupancy for a structure, provided that there are no pending violations. A final inspection is usually done to verify that the work covered by the permit has been completed in accordance with the code.

[A] 105.3.4 Conditional permits. Where permits are required and upon the request of a permit applicant, the *fire code official* is authorized to issue a conditional permit to occupy the premises or portion thereof before the entire work or operations on the premises is completed, provided that such portion or portions will be occupied safely prior to full completion or installation of equipment and operations without endangering life or public welfare. The *fire code official* shall notify the permit applicant in writing of any limitations or restrictions necessary to keep the permit area safe. The holder of a conditional permit shall proceed only to the point for which approval has been given, at the permit holder's own risk and without assurance that approval for the occupancy or the utilization of the entire premises, equipment or operations will be granted.

❖ The fire code official is allowed to issue a conditional permit prior to the completion of all work. Such a permit is to be issued only when the building or structure is available for safe occupancy prior to full completion. The permit is intended to acknowledge that some building features may not be completed even though the building is safe for occupancy.

[A] 105.3.5 Posting the permit. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the *fire code official*.

❖ Note that this section does not require that the permit be posted, but it is to be kept on the site at all times for inspection by the fire code official.

[A] 105.3.6 Compliance with code. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on *construction documents* and other data shall not prevent the *fire code official* from requiring the correction of errors in the *construction documents* and other data. Any addition to or alteration of *approved construction documents* shall be *approved* in advance by the *fire code official*, as evidenced by the issuance of a new or amended permit.

❖ This section includes an important principle regarding construction documents. The fire code official has the authority to require that errors in construction be corrected, even if the construction is based on documents that were part of the applicant's submittal for a construction permit. Thus, the code requirements are not set aside by approved drawings that may include

noncomplying items of construction. Any changes amending the application or construction of the original agreement will require a new application and permit approval.

[A] 105.3.7 Information on the permit. The *fire code official* shall issue all permits required by this code on an *approved* form furnished for that purpose. The permit shall contain a general description of the operation or occupancy and its location and any other information required by the *fire code official*. Issued permits shall bear the signature of the *fire code official* or other *approved* legal authorization.

❖ This section describes the form of the permit and requires that it be either signed by the fire code official or otherwise reflect the legal authorization of the jurisdiction. In many jurisdictions, permits are electronically generated and do not require a traditional signature.

[A] 105.3.8 Validity of permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinances of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on *construction documents*, operational documents and other data shall not prevent the *fire code official* from requiring correction of errors in the documents or other data.

❖ This section states the fundamental premise that the permit is only a license to proceed with the work. It is not a license to violate, cancel or set aside any provisions of the code. This is significant because it means that despite any errors or oversights in the approval process, the permit applicant, not the fire code official, is responsible for code compliance. Also, the permit can be revoked in accordance with Section 105.5.

[A] 105.4 Construction documents. *Construction documents* shall be in accordance with this section.

❖ This section states the scope of the sections covering construction documents.

[A] 105.4.1 Submittals. *Construction documents* and supporting data shall be submitted in two or more sets with each application for a permit and in such form and detail as required by the *fire code official*. The *construction documents* shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

Exception: The *fire code official* is authorized to waive the submission of *construction documents* and supporting data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of *construction documents* is not necessary to obtain compliance with this code.

❖ A detailed description of the work for which an application is made must be submitted in the form and detail required by the fire code official. Construction documents are to be prepared by a registered design professional when required by state laws that are in effect in the jurisdiction. States have professional registration laws that specify the type of construction documents that are to be prepared by a registered design professional. The code relies on these state laws to determine when a registered design professional is required.

The requirement for the preparation of construction documents and the submittal of calculations is specified by the code in several chapters. For example, Section 901.2 specifies that construction documents and calculations are to be submitted for fire protection systems when required by the fire code official.

[A] 105.4.1.1 Examination of documents. The *fire code official* shall examine or cause to be examined the accompanying *construction documents* and shall ascertain by such examinations whether the work indicated and described is in accordance with the requirements of this code.

❖ The requirements of this section are related to those found in Section 105.2.4 regarding the action of the fire code official in response to a permit application. The fire code official can delegate review of the construction documents to subordinates as provided for in Section 103.3.

[A] 105.4.2 Information on construction documents. *Construction documents* shall be drawn to scale upon suitable material. Electronic media documents are allowed to be submitted when *approved* by the *fire code official*. *Construction documents* shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations as determined by the *fire code official*.

❖ Construction documents are not sketches. They are comprehensive drawings, drawn to scale, that provide the details to verify that the work will comply with the code. The permit applicant must be familiar with the code requirements to prepare code-compliant construction documents. If the applicant is not familiar with the code, the construction documents will most likely not have sufficient detail to determine compliance and, thus, not be satisfactory as the basis for a permit.

[A] 105.4.2.1 Fire protection system shop drawings. Shop drawings for the fire protection system(s) shall be submitted to indicate compliance with this code and the *construction documents*, and shall be *approved* prior to the start of installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

❖ It is not unusual for the fire protection contractor(s) for a project not to have been selected at the time a permit is issued; thus detailed shop drawings for fire protection systems would not be available. Because they provide the information necessary to determine code compliance, as specified in the appropriate referenced standard in Chapter 9, detailed shop drawings

for fire protection systems must be submitted and approved by the fire code official before the contractor can begin installing the system. For example, the professional responsible for the design of an automatic sprinkler system should determine that the water supply is adequate, but will not be able to prepare a final set of hydraulic calculations if the specific materials and pipe sizes, lengths and arrangements have not been identified. Once the installing contractor is selected, specific hydraulic calculations can be prepared. Factors such as classification of the hazard, amount of water supply available and the density or concentration to be achieved by the system are to be included with the submission of the shop drawings. Specific data sheets identifying sprinklers, pipe dimensions, power requirements for smoke detectors, etc., should also be included with the submission.

[A] 105.4.3 Applicant responsibility. It shall be the responsibility of the applicant to ensure that the *construction documents* include all of the fire protection requirements and the shop drawings are complete and in compliance with the applicable codes and standards.

❖ This requirement is similar to the one in Section 901.2 regarding construction documents for fire protection systems.

The requirement in this section regarding shop drawings applies to all types of shop drawings, not just those for fire protection systems. The permit applicant is responsible for the review of the shop drawings, not the fire code official. The permit applicant is also responsible for seeing that the work on the job site complies with the code. Since a lot of the construction work is done in accordance with shop drawings, the applicant should review those drawings for code compliance to make sure field construction complies with the code.

[A] 105.4.4 Approved documents. *Construction documents approved* by the *fire code official* are *approved* with the intent that such *construction documents* comply in all respects with this code. Review and approval by the *fire code official* shall not relieve the applicant of the responsibility of compliance with this code.

❖ The applicant is responsible for making sure that construction complies with the code. If approved drawings include errors that do not comply with the code, the fire code official still has the authority to require that the errors be corrected. Thus, it is important that the permit applicant be familiar with the code requirements to prevent preparation of construction documents that do not meet the code.

[A] 105.4.4.1 Phased approval. The *fire code official* is authorized to issue a permit for the construction of part of a structure, system or operation before the *construction documents* for the whole structure, system or operation have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for parts of a structure, system or operation shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure, system or operation will be granted.

❖ The fire code official has the authority to issue a partial permit to allow for the practice of "fast tracking" a job. Any construction under a partial permit is "at the holder's own risk" and "without assurance that a permit for the entire structure, system or operation will be granted." The fire code official is under no obligation to accept work or issue a complete permit in violation of the code, ordinances or statutes simply because a partial permit had been issued. "Fast tracking" puts an unusual administrative and technical burden on the fire code official. The purpose is to proceed with construction while the design continues for other aspects of the work. Coordinating and correlating the code aspects into the project in phases requires attention to detail and project tracking so that all code issues are addressed.

[A] 105.4.5 Corrected documents. Where field conditions necessitate any substantial change from the *approved construction documents*, the *fire code official* shall have the authority to require the corrected *construction documents* to be submitted for approval.

❖ It is important that the construction documents include a record of revisions to the construction so that they truly represent the as-built condition. These records are also useful to the permit applicant for future alterations or additions to the facility.

[A] 105.4.6 Retention of construction documents. One set of *construction documents* shall be retained by the *fire code official* for a period of not less than 180 days from date of completion of the permitted work, or as required by state or local laws. One set of *approved construction documents* shall be returned to the applicant, and said set shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress.

❖ It is important that a complete, current set of construction documents be kept on the job site at all times. Another set of construction documents is to be kept by the fire code official until final approval of the completed work. It is not unusual for state laws to establish records retention criteria, and the intent of this section is to not only make the code consistent with such laws but also to provide a minimum post-construction retention period since the months immediately following construction completion are typically when most disputes arise that depend on the construction documents for resolution. The construction documents are part of the official records of the department and should be kept in accordance with Section 104.6.

[A] 105.5 Revocation. The *fire code official* is authorized to revoke a permit issued under the provisions of this code when it is found by inspection or otherwise that there has been a false statement or misrepresentation as to the material facts in the application or *construction documents* on which the permit or approval was based including, but not limited to, any one of the following:

1. The permit is used for a location or establishment other than that for which it was issued.
2. The permit is used for a condition or activity other than that listed in the permit.
3. Conditions and limitations set forth in the permit have been violated.
4. There have been any false statements or misrepresentations as to the material fact in the application for permit or plans submitted or a condition of the permit.
5. The permit is used by a different person or firm than the name for which it was issued.
6. The permittee failed, refused or neglected to comply with orders or notices duly served in accordance with the provisions of this code within the time provided therein.
7. The permit was issued in error or in violation of an ordinance, regulation or this code.

❖ The fire code official must revoke all permits shown to be based, all or in part, on any false statement or misinterpretation of fact. An applicant may subsequently reapply for a permit.The code specifies seven specific conditions that allow the fire code official to revoke a permit.

[A] 105.6 Required operational permits. The *fire code official* is authorized to issue operational permits for the operations set forth in Sections 105.6.1 through 105.6.46.

❖ Sections 105.6.1 through 105.6.46 list the conditions requiring operational permits. Many of the items are stated in general terms, in which case the fire code official is to determine whether a specific operation is a significant hazard that requires a permit.

[A] 105.6.1 Aerosol products. An operational permit is required to manufacture, store or handle an aggregate quantity of Level 2 or Level 3 aerosol products in excess of 500 pounds (227 kg) net weight.

❖ See Chapter 51 for code requirements covering aerosol products (see commentary, Section 105.6).

[A] 105.6.2 Amusement buildings. An operational permit is required to operate a special amusement building.

❖ For requirements that apply to special amusement buildings see Sections 202, 907.2.12 and 914.7.1 and Section 411 of the IBC (see commentary, Section 105.6).

[A] 105.6.3 Aviation facilities. An operational permit is required to use a Group H or Group S occupancy for aircraft servicing or repair and aircraft fuel-servicing vehicles. Additional permits required by other sections of this code include, but are not limited to, hot work, hazardous materials and flammable or combustible finishes.

❖ See Chapter 20 for aviation facility requirements (see commentary, Section 105.6).

[A] 105.6.4 Carnivals and fairs. An operational permit is required to conduct a carnival or fair.

❖ See Section 3103.3 for carnival requirements (see commentary, Section 105.6).

[A] 105.6.5 Cellulose nitrate film. An operational permit is required to store, handle or use cellulose nitrate film in a Group A occupancy.

❖ Although cellulose nitrate film is no longer in general use, there are a small number of locations in which this type of film is archived or restored for historical purposes. This section applies to those few locations (see Section 306 for cellulose nitrate film requirements).

[A] 105.6.6 Combustible dust-producing operations. An operational permit is required to operate a grain elevator, flour starch mill, feed mill, or a plant pulverizing aluminum, coal, cocoa, magnesium, spices or sugar, or other operations producing *combustible dusts* as defined in Chapter 2.

❖ See Chapter 22 for combustible dust-producing operations (see commentary, Section 105.6).

[A] 105.6.7 Combustible fibers. An operational permit is required for the storage and handling of *combustible fibers* in quantities greater than 100 cubic feet (2.8 m^3).

Exception: A permit is not required for agricultural storage.

❖ See Chapter 52 for combustible fiber requirements. The exception is for agricultural storage facilities where the hazard to persons is minimal (see Section 105.6).

[A] 105.6.8 Compressed gases. An operational permit is required for the storage, use or handling at *normal temperature and pressure* (NTP) of *compressed gases* in excess of the amounts listed in Table 105.6.8.

Exception: Vehicles equipped for and using *compressed gas* as a fuel for propelling the vehicle.

❖ See Chapter 53 for compressed gas requirements. The exception exempts vehicles equipped for compressed gas, since the code requirements for compressed gases do not apply to them.

TABLE 105.6.8
PERMIT AMOUNTS FOR COMPRESSED GASES

TYPE OF GAS	AMOUNT (cubic feet at NTP)
Corrosive	200
Flammable (except cryogenic fluids and liquefied petroleum gases)	200
Highly toxic	Any Amount
Inert and simple asphyxiant	6,000
Oxidizing (including oxygen)	504
Pyrophoric	Any Amount
Toxic	Any Amount

For SI: 1 cubic foot = 0.02832 m^3.

❖ When the use of indicated compressed gases exceeds the amounts indicated in Table 105.6.8, an operational permit is required. The quantities in the table are at normal temperature and pressure (NTP) (see Chapter 53 for compressed gas requirements).

[A] 105.6.9 Covered and open mall buildings. An operational permit is required for:

1. The placement of retail fixtures and displays, concession equipment, displays of highly combustible goods and similar items in the mall.
2. The display of liquid- or gas-fired equipment in the mall.
3. The use of open-flame or flame-producing equipment in the mall.

❖ The listed operations in a covered or open mall building require an operational permit, since they involve a significant hazard to the occupants. See Section 308 for open-flame regulations (see Section 105.6).

[A] 105.6.10 Cryogenic fluids. An operational permit is required to produce, store, transport on site, use, handle or dispense *cryogenic fluids* in excess of the amounts listed in Table 105.6.10.

Exception: Permits are not required for vehicles equipped for and using *cryogenic fluids* as a fuel for propelling the vehicle or for refrigerating the lading.

❖ See Chapter 55 for requirements regarding cryogenic fluids. The exception exempts vehicles using cryogenic fluids, since the code requirements do not apply to them.

[A] 105.6.11 Cutting and welding. An operational permit is required to conduct cutting or welding operations within the jurisdiction.

❖ See Chapter 35 for welding requirements (see commentary, Section 105.6).

[A] 105.6.12 Dry cleaning. An operational permit is required to engage in the business of dry cleaning or to change to a more hazardous cleaning solvent used in existing dry cleaning equipment.

❖ See Chapter 21 for dry cleaning regulations (see commentary, Section 105.6).

TABLE 105.6.10
PERMIT AMOUNTS FOR CRYOGENIC FLUIDS

TYPE OF CRYOGENIC FLUID	INSIDE BUILDING (gallons)	OUTSIDE BUILDING (gallons)
Flammable	More than 1	60
Inert	60	500
Oxidizing (includes oxygen)	10	50
Physical or health hazard not indicated above	Any Amount	Any Amount

For SI: 1 gallon = 3.785 L.

❖ Where cryogenic fluids are used in excess of the amounts shown in Table 105.6.10, an operational permit is required. The listed amounts are significantly different inside or outside of a building, since the hazard is greatly reduced if a leak occurs outdoors.

[A] 105.6.13 Exhibits and trade shows. An operational permit is required to operate exhibits and trade shows.

❖ The primary concern is to identify hazardous and highly flammable materials that could be involved in an exhibit or booth (see commentary, Section 105.6).

[A] 105.6.14 Explosives. An operational permit is required for the manufacture, storage, handling, sale or use of any quantity of *explosives*, *explosive materials*, fireworks or pyrotechnic special effects within the scope of Chapter 56.

Exception: Storage in Group R-3 occupancies of smokeless propellant, black powder and small arms primers for personal use, not for resale and in accordance with Section 5606.

❖ See Chapter 56 for requirements for explosives and fireworks (see commentary, Section 105.6 and Chapter 56).

The exception correlates the permit requirements for the possession, storage or use of smokeless propellant, black powder and small arms primers for personal use in Group R-3 residential occupancies with the scope of Chapter 56, as stated in Section 5601.1, Exception 4 and Section 5606.4. The exception is also consistent with NFPA 495 referenced in Chapter 56, which limits quantities allowed in residences, but allows for quantities in residences outside the scope of Chapter 56 to be regulated without a permit.

[A] 105.6.15 Fire hydrants and valves. An operational permit is required to use or operate fire hydrants or valves intended for fire suppression purposes which are installed on water systems and accessible to a fire apparatus access road that is open to or generally used by the public.

Exception: A permit is not required for authorized employees of the water company that supplies the system or the fire department to use or operate fire hydrants or valves.

❖ An operational permit is required for persons other than authorized employees of the water company or the fire department to operate fire hydrants or valves.

This restriction is intended to make sure that the use will not result in a lack of water supply and pressure that may be needed for fire-fighting purposes. The exception allows water company employees or the fire department to use fire hydrants or valves without a permit. Such use is common in order to flush out the piping periodically. When fire departments or fire districts interact with water districts, they should communicate the need for the fire department to use the hydrants and valves for nonemergency situations, such as training. A notification procedure is needed to let the water district know of this planned use.

[A] 105.6.16 Flammable and combustible liquids. An operational permit is required:

1. To use or operate a pipeline for the transportation within facilities of flammable or *combustible liquids*. This requirement shall not apply to the off-site transportation in pipelines regulated by the Department of Transportation (DOTn) nor does it apply to piping systems.
2. To store, handle or use Class I liquids in excess of 5 gallons (19 L) in a building or in excess of 10 gallons (37.9 L) outside of a building, except that a permit is not required for the following:
   2.1. The storage or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, unless such storage, in the opinion of the *fire code official*, would cause an unsafe condition.
   2.2. The storage or use of paints, oils, varnishes or similar flammable mixtures when such liquids are stored for maintenance, painting or similar purposes for a period of not more than 30 days.
3. To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment.
4. To store, handle or use Class IIIB liquids in tanks or portable tanks for fueling motor vehicles at motor fuel-dispensing facilities or where connected to fuel-burning equipment.

   Exception: Fuel oil and used motor oil used for space heating or water heating.
5. To remove Class I or II liquids from an underground storage tank used for fueling motor vehicles by any means other than the *approved*, stationary on-site pumps normally used for dispensing purposes.
6. To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and *combustible liquids* are produced, processed, transported, stored, dispensed or used.
7. To place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or *combustible liquid* tank.
8. To change the type of contents stored in a flammable or *combustible liquid* tank to a material that poses a greater hazard than that for which the tank was designed and constructed.
9. To manufacture, process, blend or refine flammable or *combustible liquids*.
10. To engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments.
11. To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles, marine craft and other special equipment at commercial, industrial, governmental or manufacturing establishments.

❖ See Chapter 57 for regulations regarding flammable and combustible liquids (see commentary, Section 105.6).

[A] 105.6.17 Floor finishing. An operational permit is required for floor finishing or surfacing operations exceeding 350 square feet (33 m^2) using Class I or Class II liquids.

❖ The concern of this section is the proper use and handling of Class I or II liquids that are used in the floor finishing process. If such liquids are not used, an operational permit is not required for floor finishing.

[A] 105.6.18 Fruit and crop ripening. An operational permit is required to operate a fruit- or crop-ripening facility or conduct a fruit-ripening process using ethylene gas.

❖ See Chapter 25 for regulations for fruit and crop ripening processes where ethylene gas is used (see commentary, Section 105.6).

[A] 105.6.19 Fumigation and insecticidal fogging. An operational permit is required to operate a business of fumigation or insecticidal fogging, and to maintain a room, vault or chamber in which a toxic or flammable fumigant is used.

❖ See Chapter 26 for fumigation and insecticidal fogging regulations within structures (see commentary, Section 105.6).

[A] 105.6.20 Hazardous materials. An operational permit is required to store, transport on site, dispense, use or handle hazardous materials in excess of the amounts listed in Table 105.6.20.

❖ See Chapter 50 for the general provisions regarding hazardous materials. Also see Chapters 51 through 67 for regulations regarding a specific hazardous material (see commentary, Section 105.6).

TABLE 105.6.20. See next page.

❖ Where the amounts of hazardous materials in the table are exceeded, an operational permit is required. This applies to the storage, transportation on site, dispensing, use or handling of the hazardous materials that are listed in the table.

Table Notes a and b create parity for Class 3 oxidizer permit amounts with the adjustments to the maximum allowable quantity per control area (MAQ) specified in Table 5003.1.1(1), Note k. This elimi-

nates the need for small apartment complexes and similar occupancies with swimming pools to obtain permits for normal pool maintenance using relatively small amounts of material.

TABLE 105.6.20
PERMIT AMOUNTS FOR HAZARDOUS MATERIALS

TYPE OF MATERIAL	AMOUNT
Combustible liquids	See Section 105.6.16
Corrosive materials	
Gases	See Section 105.6.8
Liquids	55 gallons
Solids	1000 pounds
Explosive materials	See Section 105.6.14
Flammable materials	
Gases	See Section 105.6.8
Liquids	See Section 105.6.16
Solids	100 pounds
Highly toxic materials	
Gases	See Section 105.6.8
Liquids	Any Amount
Solids	Any Amount
Oxidizing materials	
Gases	See Section 105.6.8
Liquids	
Class 4	Any Amount
Class 3	1 gallon[a]
Class 2	10 gallons
Class 1	55 gallons
Solids	
Class 4	Any Amount
Class 3	10 pounds[b]
Class 2	100 pounds
Class 1	500 pounds
Organic peroxides	
Liquids	
Class I	Any Amount
Class II	Any Amount
Class III	1 gallon
Class IV	2 gallons
Class V	No Permit Required
Solids	
Class I	Any Amount
Class II	Any Amount
Class III	10 pounds
Class IV	20 pounds
Class V	No Permit Required
Pyrophoric materials	
Gases	Any Amount
Liquids	Any Amount
Solids	Any Amount
Toxic materials	
Gases	See Section 105.6.8
Liquids	10 gallons
Solids	100 pounds
Unstable (reactive) materials	
Liquids	
Class 4	Any Amount
Class 3	Any Amount
Class 2	5 gallons
Class 1	10 gallons
Solids	
Class 4	Any Amount
Class 3	Any Amount
Class 2	50 pounds
Class 1	100 pounds
Water-reactive materials	
Liquids	
Class 3	Any Amount
Class 2	5 gallons
Class 1	55 gallons
Solids	
Class 3	Any Amount
Class 2	50 pounds
Class 1	500 pounds

(continued)

TABLE 105.6.20—continued
PERMIT AMOUNTS FOR HAZARDOUS MATERIALS

For SI: 1 gallon = 3.785 L, 1 pound = 0.454 kg.

a. 20 gallons when Table 5003.1.1(1) Note k applies and hazard identification signs in accordance with Section 5003.5 are provided for quantities of 20 gallons or less.

b. 200 pounds when Table 5003.1.1(1) Note k applies and hazard identification signs in accordance with Section 5003.5 are provided for quantities of 200 pounds or less.

[A] 105.6.21 HPM facilities. An operational permit is required to store, handle or use hazardous production materials.

❖ See Chapter 27 for the regulations regarding semiconductor fabrication facilities (see commentary, Section 105.6).

[A] 105.6.22 High-piled storage. An operational permit is required to use a building or portion thereof as a *high-piled storage area* exceeding 500 square feet (46 m^2).

❖ See Chapter 32 for high-piled storage provisions (see commentary, Section 105.6).

[A] 105.6.23 Hot work operations. An operational permit is required for hot work including, but not limited to:

1. Public exhibitions and demonstrations where hot work is conducted.
2. Use of portable hot work equipment inside a structure.

   Exception: Work that is conducted under a construction permit.
3. Fixed-site hot work equipment, such as welding booths.
4. Hot work conducted within a wildfire risk area.
5. Application of roof coverings with the use of an open-flame device.
6. When *approved*, the *fire code official* shall issue a permit to carry out a hot work program. This program allows *approved* personnel to regulate their facility's hot work operations. The *approved* personnel shall be

trained in the fire safety aspects denoted in this chapter and shall be responsible for issuing permits requiring compliance with the requirements found in Chapter 35. These permits shall be issued only to their employees or hot work operations under their supervision.

❖ See Chapter 35 for hot work regulations. The exception to Item 2 in this section recognizes that work done under a construction permit is already covered by that permit so an operational permit is not required (see commentary, Section 105.6).

[A] 105.6.24 Industrial ovens. An operational permit is required for operation of industrial ovens regulated by Chapter 30.

❖ See Chapter 30 for regulations regarding industrial ovens (see commentary, Section 105.6).

[A] 105.6.25 Lumber yards and woodworking plants. An operational permit is required for the storage or processing of lumber exceeding 100,000 board feet (8,333 ft^3) (236 m^3).

❖ See Chapter 28 for provisions for lumber yards and woodworking plants (see commentary, Section 105.6).

[A] 105.6.26 Liquid- or gas-fueled vehicles or equipment in assembly buildings. An operational permit is required to display, operate or demonstrate liquid- or gas-fueled vehicles or equipment in assembly buildings.

❖ See Section 314.4 for requirements regarding liquid- or gas-fueled vehicles inside buildings (see commentary, Section 105.6).

[A] 105.6.27 LP-gas. An operational permit is required for:

1. Storage and use of LP-gas.

   Exception: A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less or multiple container systems having an aggregate quantity not exceeding 500 gallons (1893 L), serving occupancies in Group R-3.

2. Operation of cargo tankers that transport LP-gas.

❖ See Chapter 61 for liquefied petroleum gas (LP-gas) regulations. The exception to Item 1 in this section exempts small tanks with an individual capacity of 500 gallons (1893 L) or multiple small tanks with an aggregate capacity of 500 gallons (1893 L) commonly found in residential service. A permit is required where the aggregate quantity of multiple small LP-gas containers exceeds 500 gallons (1893 L). It has become commonplace for LP-gas distributors to install LP-gas systems exceeding 500 gallons (1893 L) that consist of multiple containers in series with individual containers that do not exceed 500 gallons (1893 L), thereby avoiding the permit requirement. It is appropriate to require a permit at these locations given the significant hazard associated with these quantities. Item 2 covers cargo tankers, since they transport LP-gas onto premises covered by the code and, therefore, represent a potential hazard.

[A] 105.6.28 Magnesium. An operational permit is required to melt, cast, heat treat or grind more than 10 pounds (4.54 kg) of magnesium.

❖ See Section 5906 for the code requirements for magnesium (see commentary, Section 105.6).

[A] 105.6.29 Miscellaneous combustible storage. An operational permit is required to store in any building or upon any premises in excess of 2,500 cubic feet (71 m^3) gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork or similar combustible material.

❖ See Section 315 for requirements for miscellaneous combustible material storage (see commentary, Section 105.6).

[A] 105.6.30 Open burning. An operational permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to.

Exception: *Recreational fires*.

❖ See Section 307 for open burning provisions. Section 202 includes the definition of "Open burning." The exception exempts recreational fires, which are also defined in Section 202.

[A] 105.6.31 Open flames and torches. An operational permit is required to remove paint with a torch; or to use a torch or open-flame device in a wildfire risk area.

❖ See Section 308 for regulations regarding open flames (see commentary, Section 105.6).

[A] 105.6.32 Open flames and candles. An operational permit is required to use open flames or candles in connection with assembly areas, dining areas of restaurants or drinking establishments.

❖ See Section 308 for regulations regarding open flames (see commentary, Section 105.6).

[A] 105.6.33 Organic coatings. An operational permit is required for any organic-coating manufacturing operation producing more than 1 gallon (4 L) of an organic coating in one day.

❖ The manufacture of organic coatings is addressed in Chapter 29 (see commentary, Section 105.6).

[A] 105.6.34 Places of assembly. An operational permit is required to operate a place of assembly.

❖ Because of the higher occupant loads found in Group A occupancies, such occupancies justify an increased level of scrutiny, such as is provided through the permit process.

[A] 105.6.35 Private fire hydrants. An operational permit is required for the removal from service, use or operation of private fire hydrants.

Exception: A permit is not required for private industry with trained maintenance personnel, private fire brigade or fire departments to maintain, test and use private hydrants.

❖ The purpose of an operational permit for the removal of private fire hydrants is to see that adequate fire hydrants are maintained for use during a fire. The exception allows testing and use of private fire hydrants by trained private industry personnel without an operational permit.

[A] 105.6.36 Pyrotechnic special effects material. An operational permit is required for use and handling of pyrotechnic special effects material.

❖ See Chapter 56 for fireworks regulations. The definition of "Pyrotechnic special effects material" is listed in Section 56 (see commentary, Section 105.6).

[A] 105.6.37 Pyroxylin plastics. An operational permit is required for storage or handling of more than 25 pounds (11 kg) of cellulose nitrate (pyroxylin) plastics, and for the assembly or manufacture of articles involving pyroxylin plastics.

❖ See Chapter 65 for requirements regarding pyroxylin (cellulose nitrate) plastics (see commentary, Section 105.6).

[A] 105.6.38 Refrigeration equipment. An operational permit is required to operate a mechanical refrigeration unit or system regulated by Chapter 6.

❖ See Section 606 for mechanical refrigeration regulations (see commentary, Section 105.6).

[A] 105.6.39 Repair garages and motor fuel-dispensing facilities. An operational permit is required for operation of repair garages, and automotive, marine and fleet motor fuel-dispensing facilities.

❖ See Chapter 23 for requirements for motor fuel-dispensing facilities and repair garages (see commentary, Section 105.6).

[A] 105.6.40 Rooftop heliports. An operational permit is required for the operation of a rooftop heliport.

❖ See Chapter 20 for aviation facility requirements. Section 2007 contains helistop and heliport requirements (see commentary, Section 105.6).

[A] 105.6.41 Spraying or dipping. An operational permit is required to conduct a spraying or dipping operation utilizing flammable or *combustible liquids*, or the application of combustible powders regulated by Chapter 24.

❖ See Chapter 24 for flammable finish requirements. Section 2404 contains the spray finishing provisions, Section 2405 addresses dipping operations and Section 2406 includes powder coating regulations (see commentary, Section 105.6).

[A] 105.6.42 Storage of scrap tires and tire byproducts. An operational permit is required to establish, conduct or maintain storage of scrap tires and tire byproducts that exceeds 2,500 cubic feet (71 m^3) of total volume of scrap tires, and for indoor storage of tires and tire byproducts.

❖ See Chapter 34 for regulations regarding tire rebuilding and tire storage (see Section 105.6).

[A] 105.6.43 Temporary membrane structures and tents. An operational permit is required to operate an air-supported temporary membrane structure or a tent having an area in excess of 400 square feet (37 m^2).

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Tents open on all sides, which comply with all of the following:
   - 2.1. Individual tents having a maximum size of 700 square feet (65 m^2).
   - 2.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m^2) total.
   - 2.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided.

❖ See Chapter 31 for requirements for tents and other membrane structures. The first exception in this section exempts recreational camping tents, since they are small, temporary and have few occupants. The second exception exempts relatively small tents that are very low hazard, since they are spaced at least 12 feet (3658 mm) apart. See also commentary, Section 3103.2.

[A] 105.6.44 Tire-rebuilding plants. An operational permit is required for the operation and maintenance of a tire-rebuilding plant.

❖ See Chapter 34 for regulations regarding tire rebuilding operations (see commentary, Section 105.6).

[A] 105.6.45 Waste handling. An operational permit is required for the operation of wrecking yards, junk yards and waste material-handling facilities.

❖ See Section 315 for miscellaneous combustible materials storage requirements, Section 5004 for provisions regarding the storage of hazardous materials and Section 2808 for provisions regarding yard waste and recycling facilities (see commentary, Section 105.6).

[A] 105.6.46 Wood products. An operational permit is required to store chips, hogged material, lumber or plywood in excess of 200 cubic feet (6 m^3).

❖ See Section 2808 for requirements regarding the storage and handling of wood chips, hogged material, fines, compost and raw product in association with yard waste and recycling facilities (see commentary, Section 105.6).

[A] 105.7 Required construction permits. The *fire code official* is authorized to issue construction permits for work as set forth in Sections 105.7.1 through 105.7.16.

❖ This section addresses conditions requiring a construction permit (see Section 105.6). Generally, a construction permit is required when a safety related system or hazardous material storage is installed or an existing system or facility is modified. Other sections of the code may also apply.

In some cases, the requirements in Sections 105.7.1 through 105.7.16 are stated in only general terms. In these instances, the fire code official is to evaluate the scope of work involved for the modification or installation and determine whether a construction permit is required for the specific project.

[A] 105.7.1 Automatic fire-extinguishing systems. A construction permit is required for installation of or modification to an automatic fire-extinguishing system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

❖ See Chapter 9 for fire protection system requirements. A construction permit is required for the installation or modification of an automatic fire-extinguishing system so that the work can be verified to meet the code requirements, since the system is obviously safety related (see commentary, Section 105.7).

[A] 105.7.2 Battery systems. A permit is required to install stationary storage battery systems having a liquid capacity of more than 50 gallons (189 L).

❖ See Sections 602.1 and 608 for battery system requirements (see commentary, Section 105.6).

[A] 105.7.3 Compressed gases. When the compressed gases in use or storage exceed the amounts listed in Table 105.6.8, a construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a *compressed gas* system.

Exceptions:

1. Routine maintenance.
2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

❖ See Chapter 53 for the requirements for compressed gas systems. Where the volume of the compressed gas presents a significant health hazard and the quantity exceeds the allowed amounts in Table 105.6.8, a permit is needed to trigger construction document submittal, document review and inspections of the work on the system. The exceptions address the need for an exemption for maintenance work and to allow emergency work to proceed immediately.

[A] 105.7.4 Cryogenic fluids. A construction permit is required for installation of or *alteration* to outdoor stationary *cryogenic fluid* storage systems where the system capacity exceeds the amounts listed in Table 105.6.10. Maintenance performed in accordance with this code is not considered an *alteration* and does not require a construction permit.

❖ See Chapter 55 for the requirements for cryogenic fluids and Chapter 58 for the requirements for flammable cryogenic fluids. The application for a construction permit for cryogenic fluids is intended to trigger a plan review that will examine constraints on location and the requirements of Chapters 55 and 58.

[A] 105.7.5 Emergency responder radio coverage system. A construction permit is required for installation of or modification to emergency responder radio coverage systems and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

❖ This section establishes that a permit must be obtained for the installation or modification of the emergency responder radio coverage system (ERRCS) to ensure that the work is done correctly and that any parts replacement will be compatible with the existing system components. Since the normal maintenance of a system typically would not involve alteration of the system, it would not require a permit.

[A] 105.7.6 Fire alarm and detection systems and related equipment. A construction permit is required for installation of or modification to fire alarm and detection systems and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

❖ See Section 907 for fire alarm and detection requirements. A construction permit is required for installation or modification of these systems since they are obviously safety related. A permit is not required for maintenance when no modifications are made to the systems (see commentary, Section 105.7).

[A] 105.7.7 Fire pumps and related equipment. A construction permit is required for installation of or modification to fire pumps and related fuel tanks, jockey pumps, controllers and generators. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

❖ See Section 913 for requirements regarding fire pumps. A construction permit is required for modification or installation of equipment that is necessary to serve the sprinkler or standpipe system. This construction work must be monitored since these are safety related systems (see commentary, Section 105.7).

[A] 105.7.8 Flammable and combustible liquids. A construction permit is required:

1. To install, repair or modify a pipeline for the transportation of flammable or *combustible liquids*.
2. To install, construct or alter tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and *combustible liquids* are produced, processed, transported, stored, dispensed or used.
3. To install, alter, remove, abandon or otherwise dispose of a flammable or *combustible liquid* tank.

❖ See Chapter 57 for provisions for flammable and combustible liquids. The intent of this section is to require a construction permit for any of the three activities listed, since flammable and combustible liquids are a significant hazard (see commentary, Section 105.7).

[A] 105.7.9 Hazardous materials. A construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a storage facility or other area regulated by Chapter 50 when the hazardous materials in use or storage exceed the amounts listed in Table 105.6.20.

Exceptions:

1. Routine maintenance.
2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

❖ A construction permit is needed for hazardous-material-related construction to ensure submittal of construction documents, document review and inspection of the work for code compliance. The exceptions provide exemptions for maintenance work and allow emergency work to proceed immediately, provided the permit application is submitted within two working days of starting the job.

[A] 105.7.10 Industrial ovens. A construction permit is required for installation of industrial ovens covered by Chapter 30.

Exceptions:

1. Routine maintenance.
2. For repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

❖ A construction permit is required for industrial oven installation so that the requirements in Chapter 30 for industrial ovens can be verified. The exceptions provide exemptions for maintenance work and allow emergency work to proceed immediately, provided the permit is applied for within two working days after work begins.

[A] 105.7.11 LP-gas. A construction permit is required for installation of or modification to an LP-gas system.

❖ See Chapter 61 for the requirements for LP-gas storage, handling and transportation (see commentary, Section 105.7).

[A] 105.7.12 Private fire hydrants. A construction permit is required for the installation or modification of private fire hydrants.

❖ A construction permit is needed for the installation or modification of private fire hydrants so that they remain in service for fire protection purposes. The water flow rate and pressure capability need to be maintained.

[A] 105.7.13 Solar photovoltaic power systems. A construction permit is required to install or modify solar photovoltaic power systems.

❖ Section 605.11 regulates solar photovoltaic power system installations on buildings. Because of the unique electrical and physical hazards they present to fire fighters and the impact such systems have on fire suppression operations, a permit is required.

[A] 105.7.14 Spraying or dipping. A construction permit is required to install or modify a spray room, dip tank or booth.

❖ See Chapter 24 for flammable finish requirements. The spray finishing requirements are in Section 2404, while dipping operations regulations are in Section 2405 (see commentary, Section 105.7).

[A] 105.7.15 Standpipe systems. A construction permit is required for the installation, modification or removal from service of a standpipe system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

❖ See Section 905 for standpipe system requirements. Construction permits are required for standpipe systems because they are safety related fire protection systems. Ordinary maintenance that does not involve modifications to the system does not require a construction permit.

[A] 105.7.16 Temporary membrane structures and tents. A construction permit is required to erect an air-supported temporary membrane structure or a tent having an area in excess of 400 square feet (37 m^2).

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Funeral tents and curtains, or extensions attached thereto, when used for funeral services.
3. Tents and awnings open on all sides, which comply with all of the following:
   - 3.1. Individual tents shall have a maximum size of 700 square feet (65 m^2).
   - 3.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m^2) total.
   - 3.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be maintained.

❖ See Chapter 31 for requirements regarding tents and other membrane structures. The exceptions are for tents where the hazard is very low. They provide needed exemptions for tents used for recreational camping and funerals. Relatively small tents and awnings that are open on all sides and are located a minimum of 12 feet (3658 mm) apart are also exempt (see commentary, Section 3103.2).

SECTION 106
INSPECTIONS

[A] 106.1 Inspection authority. The *fire code official* is authorized to enter and examine any building, structure, marine vessel, vehicle or premises in accordance with Section 104.3 for the purpose of enforcing this code.

❖ The first part of this section establishes the right of the fire code official to enter the premises to make the permit inspections required by Section 104. Permit application forms typically include a statement in the certification signed by the applicant (who is the owner or owner's agent) granting the fire code official the authority to enter areas covered by the permit to enforce code provisions related to the permit.

The right to enter other structures or premises is more limited. First, to protect the right of privacy, the owner or occupant must grant the fire code official permission before the interior of the property can be inspected. Permission is not required for inspections that can be accomplished from within the public right-of-way. Second, such access may be denied by the owner or occupant. Unless the inspector has "reasonable cause" to believe that a violation of the code exists, access may be unattainable. Third, fire code officials must present proper identification (see Section 104.4) and request admittance during reasonable hours—usually the normal business hours of the establishment—to be admitted. Fourth, inspections must be aimed at securing or determining compliance with the provisions and intent of the regulations that are specifically within the established scope of the fire code official's authority. Searches to gather information for the purpose of enforcing other codes, ordinances or regulations are considered unreasonable and are prohibited by the Fourth Amendment to the U.S. Constitution.

Reasonable cause in the context of this section must be distinguished from probable cause, which is required to gain access to property in criminal cases. The burden of proof for establishing reasonable cause may vary among jurisdictions. Usually, an inspector must show that the property is subject to inspection under the provisions of the code (see Section 104) that the interests of the public health, safety and welfare outweigh the individual's right to maintain privacy and that such an inspection is required solely to determine compliance with the provisions of the code. Many jurisdictions do not recognize the concept of an administrative warrant, and may require the fire code official to prove probable cause in order to gain access upon refusal. This burden of proof is usually more substantial, often requiring the fire code official to stipulate in advance why access is needed (usually access is restricted to gathering evidence for seeking an indictment or making an arrest); what specific items or information is sought; its relevance to the case against the individual subject; how knowledge of the relevance of the information or items sought was obtained; and how the evidence sought will be used. In all such cases, the right to privacy must always be weighed against the right of the fire code official to conduct an inspection to determine whether the health, safety or welfare of the public is in jeopardy. Such important and complex constitutional issues should be discussed with the jurisdiction's legal counsel. Jurisdictions should establish procedures for securing the necessary court orders when an inspection is considered necessary following a refusal.

[A] 106.2 Inspections. The *fire code official* is authorized to conduct such inspections as are deemed necessary to determine the extent of compliance with the provisions of this code and to approve reports of inspection by *approved* agencies or individuals. All reports of such inspections shall be prepared and submitted in writing for review and approval. Inspection reports shall be certified by a responsible officer of such *approved* agency or by the responsible individual. The *fire code official* is authorized to engage such expert opinion as deemed necessary to report upon unusual, detailed or complex technical issues subject to the approval of the governing body.

❖ This section establishes the fire code official's authority to inspect buildings, structures or premises to verify that the requirements of the code are met or to accept written reports of inspections by an approved agency. The code does not, however, establish the frequency of inspections or even require that inspections be conducted, since the code does not presume to interpret or influence the adopting jurisdiction's political, social and economic priorities. Jurisdictions may establish their inspection priorities and frequencies based on a variety of factors, including the availability of inspection resources; the level of available fire suppression services; the value of premises to the community or the potential disruption to community services or stability if a fire occurs. In summary, each community determines and assumes its own acceptable risk level.

In order to expand the available resources for inspection purposes, the fire code official is also authorized to approve a third-party agency that is regularly engaged in conducting relevant tests or furnishing inspection services. Approval of such an agency may be acquired through review of the résumés and references of the agency and its personnel, and analyzing the capacity and capability of the agency to perform the work. Additional guidance can be obtained by reviewing the provisions of Sections 1703 and 1704 of the IBC.

When unusual, extraordinary or complex technical issues arise relative to building safety, the fire code official has the authority to seek the opinion and advice of experts. Since this usually involves the expenditure of funds, the approval of the jurisdiction's chief administrative authority must be obtained.

[A] 106.2.1 Inspection requests. It shall be the duty of the holder of the permit or their duly authorized agent to notify

the *fire code official* when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

❖ It is the responsibility of the permit holder or other authorized person, such as the contractor performing the work, to arrange for the required inspections when completed work is ready and to allow for sufficient time for the fire code official to schedule a visit to the site to prevent work from being concealed prior to being inspected. Access to the work to be inspected must be provided, including any special means such as a ladder to gain access.

[A] 106.2.2 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *fire code official*. The *fire code official*, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected, and such portion shall not be covered or concealed until authorized by the *fire code official*.

❖ This section establishes that work cannot progress beyond the point of a required inspection without the fire code official's approval. Upon making the inspection, the fire code official must either approve the completed work or notify the permit holder or other responsible party of that which does not comply with the code. Approvals and notices of noncompliance must be in writing, as required by Section 109.2, to avoid any misunderstanding as to what is required. Any item not approved cannot be covered or concealed until it has been corrected and approved by the fire code official.

[A] 106.3 Concealed work. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Whenever any installation subject to inspection prior to use is covered or concealed without having first been inspected, the *fire code official* shall have the authority to require that such work be exposed for inspection. Neither the *fire code official* nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

❖ This section addresses the procedure that is available to the fire code official for inspection of concealed work. In many jurisdictions, the contractor or permit holder of an operation or a construction project is to contact the local fire inspection authority when work is completed but still exposed to allow inspection. The section requires that any work that will be concealed upon completion must remain exposed until an inspection is made. However, if the work that requires inspection is covered up before the inspection takes place, the fire code official has the authority to require removal of the construction that conceals the item to be inspected. The section also makes it clear that any expense incurred in removing or replacing material that conceals an item to be inspected is not the responsibility of either the fire code official or the jurisdiction. Obviously, this can be a time consuming and expensive procedure that can be eliminated by good communication and cooperation between the contractor or permit holder and the fire code official.

[A] 106.4 Approvals. Approval as the result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel provisions of this code or of other ordinances of the jurisdiction shall not be valid.

❖ As with the issuance of permits (see commentary, Section 105.3), approval as a result of an inspection is not a license to violate the code; and an approval in violation of the code does not relieve the applicant from complying with the code and is not valid. This is significant because even if there are errors or oversights in the approval process, the permit applicant or other recipient of the inspection, not the fire code official, is still responsible for code compliance.

SECTION 107
MAINTENANCE

[A] 107.1 Maintenance of safeguards. Whenever or wherever any device, equipment, system, condition, arrangement, level of protection, or any other feature is required for compliance with the provisions of this code, or otherwise installed, such device, equipment, system, condition, arrangement, level of protection, or other feature shall thereafter be continuously maintained in accordance with this code and applicable referenced standards.

❖ This section does not identify who is responsible for maintenance because that determination should be made in accordance with the legal documents created between owners and occupants, such as a lease. The owner of a structure or premises, however, is usually the party primarily responsible for its maintenance, since the owner stands to gain the most from a well-maintained property. One of the underlying assumptions is that maintaining a commercial property in good condition allows the owner to recoup a substantial portion of his or her investment in maintenance. There are three factors that may influence owners to comply with code requirements:

- Code compliance requires only a small additional investment in the property;
- The owner has a long-term interest in the property; and
- The owner expects profitability after incurring the additional expense of complying with the code.

While all these factors represent economic incentives, fire code officials should be equally aware of potential disincentives to compliance, such as assessable value, expiring tax credits or historic, architectural or aesthetic criteria. The fire code official need not belabor the justifications for compliance, but should be prepared to acknowledge the owner's rationalizations for failure to comply.

This section also emphasizes that any "otherwise installed" system that currently exists must be maintained. For example, an existing fire protection system cannot be removed from a building just because it is not required in new or existing buildings by current codes.

[A] 107.2 Testing and operation. Equipment requiring periodic testing or operation to ensure maintenance shall be tested or operated as specified in this code.

❖ This section addresses periodic testing or operation to verify that the equipment can be expected to operate when needed. For example, see Section 901.6 for inspection and testing requirements for fire protection systems.

[A] 107.2.1 Test and inspection records. Required test and inspection records shall be available to the *fire code official* at all times or such records as the *fire code official* designates shall be filed with the *fire code official.*

❖ Test and inspection records must be available to the fire code official for verification that the tests and inspections required by the code and the referenced standards are in compliance.

If the fire code official requests, such records must be filed with the jurisdictional office.

[A] 107.2.2 Reinspection and testing. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achieve compliance with this code. The work or installation shall then be resubmitted to the *fire code official* for inspection and testing.

❖ This section simply requires that an installation be of such quality that it will pass any tests or inspections required by the code. For example, if a fire alarm system did not pass the installation test upon completion of the system, the system is to be reworked until it passes the test.

[A] 107.3 Supervision. Maintenance and testing shall be under the supervision of a responsible person who shall ensure that such maintenance and testing are conducted at specified intervals in accordance with this code.

❖ Maintenance supervision is needed to verify that the testing and general supervision is done regularly. Section 901.6 states code requirements regarding testing and maintenance of the fire protection systems.

[A] 107.4 Rendering equipment inoperable. Portable or fixed fire-extinguishing systems or devices, and fire-warning systems, shall not be rendered inoperative or inaccessible, except as necessary during emergencies, maintenance, repairs, *alterations*, drills or prescribed testing.

❖ If fire protection systems are going to be effective when needed, they must be in good operating condition. This section specifies those circumstances when they are allowed to be temporarily out of service. See Section 901.6 for code requirements regarding testing and maintenance of the fire protection systems.

[A] 107.5 Overcrowding. Overcrowding or admittance of any person beyond the *approved* capacity of a building or a portion thereof shall not be allowed. The *fire code official*, upon finding any overcrowding conditions or obstructions in *aisles*, passageways or other *means of egress*, or upon finding any condition which constitutes a life safety hazard, shall be authorized to cause the event to be stopped until such condition or obstruction is corrected.

❖ The key to enforcing this provision successfully is good judgment. Rarely is it possible to count accurately the number of people in any given place of public assembly. Usually, the proprietors or operators of such events have no accurate estimate of the crowd size or they are unwilling to provide an estimate. Despite these difficulties, when the number of people is too large to permit aisles and required egress elements to remain clear or at least flow smoothly, remedies must be sought. In many instances, overcrowding can be remedied by simply preventing any more occupants from entering in order to limit the potential hazard to those occupants already inside. If the fire code official determines that preventing further access will be insufficient in itself, he or she is authorized to order the owner or operator to stop the event until the hazardous condition is abated, the approved occupant load is reestablished and resumption of the event is authorized by the fire code official.

SECTION 108
BOARD OF APPEALS

[A] 108.1 Board of appeals established. In order to hear and decide appeals of orders, decisions or determinations made by the *fire code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The *fire code official* shall be an ex officio member of said board but shall have no vote on any matter before the board. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *fire code official*.

❖ This section provides an objective forum for settling disputes regarding the application or interpretation of the code requirements. The board is required to issue a written decision to the appellant who brought the matter before the board and to the fire code official.

Note that the fire code official is a nonvoting member of the board. The board of appeals is an effective decision-making body that is commonly used when the owner or owner's agent and the fire code official do not agree on a matter relating to the application of the code.

[A] 108.2 Limitations on authority. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall have no authority to waive requirements of this code.

❖ This section states the scope of the issues that are to be addressed by the board of appeals and limits its authority to ruling on these issues. Commonly, the issues relate to the applicability of the code or the interpretation of the code to a given situation. The board listens to both the person who filed the appeal and to the fire code official before ruling on the matter.

This section specifically states that the board does not have the authority to waive code requirements; however, the board has the authority to accept an alternative method of protection or safety if, in its view, it is equivalent to the specific requirement in the code.

[A] 108.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to hazards of fire, explosions, hazardous conditions or *fire protection systems*, and are not employees of the jurisdiction.

❖ It is important that the decisions of the board of appeals are based purely on the technical merits involved in an appeal; it is not the place for policy or political deliberations. The members of the board of appeals are, therefore, expected to have experience in matters within the scope of the code and must be of the highest character, competence and status in their professions and the community at large. Appendix A of the code provides more detailed qualifications for board of appeals members and can be adopted by jurisdictions desiring that level of expertise (see commentary, Appendix A).

SECTION 109
VIOLATIONS

[A] 109.1 Unlawful acts. It shall be unlawful for a person, firm or corporation to erect, construct, alter, repair, remove, demolish or utilize a building, occupancy, premises or system regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

❖ Section 109 establishes that compliance with the code is required, and what measures are to be taken for noncompliance.

[A] 109.2 Owner/occupant responsibility. Correction and abatement of violations of this code shall be the responsibility of the *owner*. If an occupant creates, or allows to be created, hazardous conditions in violation of this code, the occupant shall be held responsible for the abatement of such hazardous conditions.

❖ Hazards related to use and occupancy, and not those related to fixed equipment or installations, fall within the scope of the occupants' responsibility. Owners, however, may become liable if they allow the unlawful operation or continuation of a public nuisance on a property under their control, especially if they knowingly or willfully lease the property in violation of fire, zoning or building regulations.

The simple rule for determining what constitutes an owner's, rather than the occupants', responsibility is whether or not the issue involves fixed equipment installations or if the structure is separate from those items related to occupancy. The owner is usually responsible for the physical maintenance of the building or structure and its utilities and appurtenances (that is, building services and systems).

[A] 109.3 Notice of violation. When the *fire code official* finds a building, premises, vehicle, storage facility or outdoor area that is in violation of this code, the *fire code official* is authorized to prepare a written notice of violation describing the conditions deemed unsafe and, when compliance is not immediate, specifying a time for reinspection.

❖ The fire code official has a duty to supply owners, agents or occupants with a written notice of code violations on the premises under their control. When possible, both the owner and the occupants should be made aware of hazardous conditions. Such notices constitute the first of several steps in the due process procedure. Violation notices must clearly indicate the defect and its location (including citation of the code section being violated), what must be done to correct the violation and the date of the reinspection. Owners, agents or occupants should also be supplied with information regarding penalties, permit applications and appeal procedures. The notice or order must be signed by the fire code official who issued it and he or she should provide a space for the owner, agent or occupants' signature to acknowledge receipt of the document. If possible, duplicate or triplicate copies should be prepared, with the original notice issued to the responsible party. Other copies should be maintained by the inspector and the departmental record keeper.

[A] 109.3.1 Service. A notice of violation 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 notice of violation shall be posted on the premises in a conspicuous place at or near the entrance to such premises and the notice of violation shall be mailed by certified mail with return receipt requested or a certificate of mailing, to the last known address of the *owner*, occupant or both.

❖ Service methods are listed by order or preference. Personal service of the owner at the premises cited, followed by the agent and occupant, with a signature acknowledging receipt, is the first and best method of legal service. The next most desirable method is service to these same parties in the order indicated at their place of business when it is not the premises cited.

While post office delivery by ordinary first-class mail is acceptable, most jurisdictions prefer certified mail with return receipt, followed by a certificate of mailing; however, owners familiar with the legal process will often refuse to accept certified mail. As a result, many jurisdictions follow up returned certified mail with a request for a certificate of mailing. A certificate of mailing includes a certification by the mail carrier or post office that the item was physically delivered to the address indicated, but does not verify that the addressee actually took possession of the item. The least desirable method of service is physically posting the premises with the violation notice. When service proves difficult, many jurisdictions pursue the mailing and posting service options simultaneously to exhaust all service methods. Jurisdictions should consult legal counsel about case law regarding legal service in their communities. The following methods are most common:

- Personal to violator.
- Personal to party at premises.
- Certified mail with return receipt.
- First-class mail with certificate of mailing.
- Posting at the premises.

[A] 109.3.2 Compliance with orders and notices. A notice of violation issued or served as provided by this code shall be complied with by the *owner*, operator, occupant or other person responsible for the condition or violation to which the notice of violation pertains.

❖ The party responsible for the condition that is in noncompliance is required by this section to bring the property into code compliance. See the remainder of Section 109 for what is to be done if this does not occur.

[A] 109.3.3 Prosecution of violations. If the notice of violation is not complied with promptly, the *fire code official* is authorized to request the legal counsel of the jurisdiction to institute the appropriate legal proceedings at law or in equity to restrain, correct or abate such violation or to require removal or termination of the unlawful occupancy of the structure in violation of the provisions of this code or of the order or direction made pursuant hereto.

❖ The duty to pursue legal remedies through judicial due process is established by this section. Local prosecutors and fire code officials should establish policies covering the following issues regarding judicial due process proceedings:

- Length of compliance period for representative violations;
- Quality or quantity of progress toward compliance warranting an extension or representing reasonable intent to comply;
- Whether court filings should be sought during the appeal application period;
- Rules for obtaining arrest warrants for code violations; and
- Rules for obtaining administrative and criminal search warrants.

The cooperation of the police department and other law enforcement agencies should be coordinated in advance. When necessary to enforce the code provisions, arrangements should be made to have police or other law enforcement personnel make arrests for code violations or ignoring the lawful orders of the fire code official.

[A] 109.3.4 Unauthorized tampering. Signs, tags or seals posted or affixed by the *fire code official* shall not be mutilated, destroyed or tampered with, or removed, without authorization from the *fire code official*.

❖ This section states that tampering with signs, seals or tags posted at the property is a violation of the code. The safety of the occupants may depend on the warning signs posted by the fire code official remaining in place.

[A] 109.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the *approved construction documents* or directive of the *fire code official*, or of a permit or certificate used under provisions of this code, shall be guilty of a **[SPECIFY OFFENSE]**, punishable by a fine of not more than **[AMOUNT]** dollars or by imprisonment not exceeding **[NUMBER OF DAYS]**, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

❖ Penalties for violating code provisions must be established in adopting legislation. The specification of the offense, the dollar amount for the fine and the maximum number of days of imprisonment are to be specific in the adopting ordinance of the jurisdiction. A sample adoption ordinance is on page ix of the code.

The code does not establish penalties for violations. The jurisdiction's judicial and legislative bodies should work with the fire code official to establish reasonable and equitable penalties for violators. The penalties set for individual violations should be representative of the severity of the act committed and the culpability of the violator. Once served with a violation notice, the violator becomes guilty of a separate offense for each day the violation continues to exist; however, most prosecutors and courts are reluctant to impose this penalty for days during the compliance

period. Many violators wrongly assume that the Seventh Amendment of the U.S. Constitution, which offers protection against double jeopardy, exempts them from compliance once they have paid or served their sentence for a previous fire code violation. This is certainly not the case. Most courts reinforce the compliance requirement in such cases by making compliance a condition for completing the sentence. Failure to comply with the judge's order mandating compliance may result in a contempt of court charge.

[A] 109.4.1 Abatement of violation. In addition to the imposition of the penalties herein described, the *fire code official* is authorized to institute appropriate action to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises.

❖ Even though the person who violated the code has paid a fine and whatever other sentence that may be imposed for the jurisdiction under Section 109.3, the fire code official has the right to require that the code violation be removed. If the violation is not abated, the fire code official has the right to prevent occupancy until the violation is addressed. Usually, the court will require that the violation be corrected as part of the sentence of noncompliance prior to the occupancy of the building.

SECTION 110
UNSAFE BUILDINGS

[A] 110.1 General. If during the inspection of a premises, a building or structure, or any building system, in whole or in part, constitutes a clear and inimical threat to human life, safety or health, the *fire code official* shall issue such notice or orders to remove or remedy the conditions as shall be deemed necessary in accordance with this section, and shall refer the building to the building department for any repairs, *alterations*, remodeling, removing or demolition required.

❖ The fire code official is required to order the correction or abatement of specific hazardous conditions that are within the scope of the code and to refer to the building department for necessary permits those operations that are within the scope of that department. The conditions listed in Section 110.1.1 represent many of the most common hazardous conditions encountered. Specific requirements supporting each of these objectives are found throughout the code.

[A] 110.1.1 Unsafe conditions. Structures or existing equipment that are or hereafter become unsafe or deficient because of inadequate *means of egress* or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or which involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. A vacant structure which is not secured against unauthorized entry as required by Section 311 shall be deemed unsafe.

❖ Courts have continually upheld the right of states and their authorized subdivisions to abate public nuisances, even by demolition, and bill or assess the property owner through a tax lien for their expenses. However, care must be exercised to maintain compliance with the due process and equal protection doctrines of the Fourth and Fourteenth Amendments of the U.S. Constitution. Jurisdictions should consult legal counsel and adopt appropriate guidelines before engaging in a nuisance abatement program.

Uninhabited or abandoned buildings that are not secured against unauthorized entry as required by Section 311 have a very high probability of intentionally set fires. When fires occur in these buildings, they present a host of unusual hazards to fire fighters. Since the buildings are uninhabited, fires may develop for significant periods of time before they are detected and reported. Accordingly, such unsecured buildings are declared by this section to be unsafe and therefore subject to remediation as provided in Section 110 (see commentary, Section 311).

[A] 110.1.2 Structural hazards. When an apparent structural hazard is caused by the faulty installation, operation or malfunction of any of the items or devices governed by this code, the *fire code official* shall immediately notify the building code official in accordance with Section 110.1.

❖ The fire code official is required to report structurally unsafe buildings to the building official to secure abatement of unsafe conditions. Courts have continually upheld the right of states and their authorized subdivisions to abate public nuisances, even by demolition, and bill or assess the property owner through a tax lien for their expenses. However, care must be exercised to maintain compliance with the due process and equal protection doctrines of the Fourth and Fourteenth Amendments of the U.S. Constitution.

[A] 110.2 Evacuation. The *fire code official* or the fire department official in charge of an incident shall be authorized to order the immediate evacuation of any occupied building deemed unsafe when such building has hazardous conditions that present imminent danger to building occupants. Persons so notified shall immediately leave the structure or premises and shall not enter or re-enter until authorized to do so by the *fire code official* or the fire department official in charge of the incident.

❖ The fire code official must immediately order the evacuation of any premises posing a clear and imminent threat to life or property. Building occupants who are warned must comply with the evacuation order without delay. Upon leaving the building, occupants may not reenter until authorization is given by the fire code official. Severe and immediate danger anticipated in this section dictates such extreme measures to protect public health, safety and welfare.

[A] 110.3 Summary abatement. Where conditions exist that are deemed hazardous to life and property, the *fire code official* or fire department official in charge of the incident is authorized to abate summarily such hazardous conditions that are in violation of this code.

❖ As indicated in the commentary to Section 110.1.1, the fire code official is authorized to seek abatement action by the building department and bill the owner for the abatement costs. Obviously, this is an extreme measure and should be done only when the owner, operator or occupant does not take such measures under the requirements of Section 110.4.

[A] 110.4 Abatement. The *owner*, operator or occupant of a building or premises deemed unsafe by the *fire code official* shall abate or cause to be abated or corrected such unsafe conditions either by repair, rehabilitation, demolition or other *approved* corrective action.

❖ This section describes the usual circumstance in which a building has such critical violations that it is declared unsafe by the fire code official. The owner, operator or occupant should take abatement measures to correct the unsafe condition. If this is not done promptly, the fire code official has the authority to directly abate the unsafe conditions and bill the owner for the abatement work in accordance with Sections 110.1.1 and 110.3.

SECTION 111
STOP WORK ORDER

[A] 111.1 Order. Whenever the *fire code official* finds any work regulated by this code being performed in a manner contrary to the provisions of this code, or in a dangerous or unsafe manner, the *fire code official* is authorized to issue a stop work order.

❖ The fire code official is authorized to issue a stop work order when the work does not comply with the code. Obviously, this is an extreme and costly measure that should be reserved for situations in which the violation is a serious safety hazard.

[A] 111.2 Issuance. A stop work order shall be in writing and shall be given to the *owner* of the property, or to the *owner's* agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work is authorized to resume.

❖ The stop work order is to be in writing and must cite the reason for issuing the order.

Upon receipt of a violation notice from the fire code official, all construction activities identified in the notice must immediately cease, except as expressly permitted to correct the violation.

Construction activities that are outside of the scope of the issue involved with the stop work order are not affected and need not stop; thus, the scope of the order must be clearly stated.

[A] 111.3 Emergencies. Where an emergency exists, the *fire code official* shall not be required to give a written notice prior to stopping the work.

❖ This section gives the fire code official the authority to stop the work in dispute immediately when, in his or her opinion, there is an unsafe emergency condition that has been created by the work. The need for the written notice is suspended for this situation so that the work can be stopped immediately. After the work is stopped, immediate measures should be taken to correct the work at issue.

[A] 111.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than **[AMOUNT]** dollars or more than **[AMOUNT]** dollars.

❖ The local jurisdiction is to designate the fine that is to apply to any person who continues work that is at issue, other than abatement work. The dollar amounts for the minimum and maximum fines are to be specified in the adopting ordinance. A sample adoption ordinance is on page ix.

SECTION 112
SERVICE UTILITIES

[A] 112.1 Authority to disconnect service utilities. The *fire code official* shall have the authority to authorize disconnection of utility service to the building, structure or system in order to safely execute emergency operations or to eliminate an immediate hazard. The *fire code official* shall notify the serving utility and, whenever possible, the *owner* and occupant of the building, structure or service system of the decision to disconnect prior to taking such action if not notified prior to disconnection. The *owner* or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

❖ This section would authorize the fire code official to take definitive action to abate hazards to the public safety, or which interfere with emergency operations, caused by or contributed to by building utilities by means of disconnection of one or more of a building's utility services where all other lesser remedies have proven ineffective. This section also provides that such an action must be preceded by written notice to the utility and the owner and occupants of the building. When the hazard to the public health, safety or welfare is so imminent as to mandate immediate disconnection, this section makes it clear that the fire code official has the authority and even the obligation to cause disconnection without notice.

SECTION 113
FEES

[A] 113.1 Fees. A permit shall not be issued until the fees have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

❖ The code anticipates that jurisdictions will establish their own fee schedules. It is the intent that the fees collected by the department for permit issuance, plan review and inspection be adequate to cover the costs to the department in these areas. If the department has additional duties, then its budget will need to be supplemented from the general fund. This section requires that all fees be paid prior to permit issuance or release of an amendment to a permit. Since department operations are intended to be supported by fees paid by the user of department activities, it is important that these fees are received before incurring any expense. This philosophy has resulted in some departments having fees paid prior to the performance of two areas of work: plan review and inspection.

[A] 113.2 Schedule of permit fees. A fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

❖ The jurisdiction is responsible for promulgating a schedule of fees to be charged for operational or construction permits. Permit fees should be established by law, such as in an ordinance adopting the code, a separate ordinance or a legally promulgated regulation, as required by state or local law. Fee schedules for operational permits should be based on an analysis of the amount of time and resources to be expended by the jurisdiction in administering the permit. Fee schedules for construction permits are often based on a valuation of the work to be performed. This concept is based on the proposition that the valuation of a project is related to the amount of work to be expended in plan review, inspections and administering the permit, plus an excess to cover the department overhead.

[A] 113.3 Work commencing before permit issuance. Any person who commences any work, activity or operation regulated by this code before obtaining the necessary permits shall be subject to an additional fee established by the applicable governing authority, which shall be in addition to the required permit fees.

❖ The fire code official will incur certain costs (i.e., inspection time and administrative) when investigating and citing a person who has commenced work, activity or operation without having obtained a permit. The fire code official is, therefore, entitled to recover these costs by establishing a fee, in addition to that collected when the required permit is issued, to be imposed on the responsible party. Note that this is not a penalty, as described in Section 109.3, for which the person can also be liable.

[A] 113.4 Related fees. The payment of the fee for the construction, *alteration*, removal or demolition of work done in connection to or concurrently with the work or activity authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

❖ The fees for a permit may be in addition to other fees required by the jurisdiction or others for related items, such as sewer connections, water service taps, driveways and signs and others. It cannot be construed that the fire code permit fee includes these other items.

[A] 113.5 Refunds. The applicable governing authority is authorized to establish a refund policy.

❖ This section allows for a refund of fees, which may be full or partial, typically resulting from the revocation, abandonment or discontinuance of a project or operation for which a permit has been issued and fees have been collected. The refund of fees should be related to the cost of enforcement services not provided because of the termination of the project or operation. The fire code official, when authorizing a fee refund, is authorizing the disbursement of public funds; therefore, the request for a refund should be in writing and for good cause.

Bibliography

The following resource materials were used in the preparation of the commentary for this chapter of the code:

2009 International Code Interpretations. Washington, DC: International Code Council, 2009.

Code Changes Resource Collection—2012 International Fire Code. Washington, DC: International Code Council, 2011.

NFPA 550—07, *Fire Safety Concepts Tree*. Quincy, MA: National Fire Protection Association, 2007.

Robertson, J. C. and W.E. Koffel, Jr. *Fire Prevention Organization and Management. Course Guide*. Emmitsburg, MD: Executive Office of the President, U.S. Federal Emergency Management Agency, U.S. Fire Administration, National Fire Academy and Open Learning Fire Service Program, 1990.

Rosenbauer, D. L. *Introduction to Fire Protection Law*. Quincy, MA: National Fire Protection Association, 1978.

Chapter 2: Definitions

General Comments

All terms used in the code and their definitions are listed alphabetically in Chapter 2. While a defined term may be used in one chapter or another, the meaning provided in Chapter 2 is applicable throughout the code.

Where understanding of a term's definition is especially key to or necessary for understanding of a particular code provision, the term is shown in italics wherever it appears in the code. This is true only for those terms that have a meaning that is unique to the code. In other words, the generally understood meaning of a term or phrase might not be sufficient or consistent with the meaning prescribed by the code; therefore, it is essential that the code-defined meaning be known.

Guidance regarding tense, gender and plurality of defined terms as well as terms not defined in this code is also provided.

Purpose

Codes by their very nature are technical documents. Literally, every word, term and punctuation mark can add to or change the meaning of the intended result.

Furthermore, the code, with its broad scope of applicability, includes terms that have a different meaning than the generally accepted meaning of the term. Additionally, these terms can have multiple meanings depending on the context or discipline in which they are being used.

For these reasons, maintaining a consensus on the specific meaning of terms contained in the code is essential. Chapter 2 performs this function by stating clearly what specific terms mean for the purpose of the code.

SECTION 201 GENERAL

201.1 Scope. Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings shown in this chapter.

❖ This section contains the definitions for application of the code and the use of the words and terms is governed by the provisions of this section. This includes code-defined terms as well as those terms that are not.

201.2 Interchangeability. Words used in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

❖ While the definitions are to be taken literally, gender and tense are to be considered interchangeable.

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the *International Building Code*, *International Fuel Gas Code*, *International Mechanical Code* or *International Plumbing Code*, such terms shall have the meanings ascribed to them as in those codes.

❖ This section states that when a term is not defined in the code but is defined in another volume of the *International Code*® family, the meaning found in those codes can be used. This adds consistency to the application of the codes.

201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies. *Merriam Webster's Collegiate Dictionary, 11th Edition*, shall be considered as providing ordinarily accepted meanings.

❖ Another resource for defining words or terms not defined within the code or other *International Codes*® (I-Codes®) is simply their "ordinarily accepted meaning." With some words, a dictionary definition may be sufficient, if the definition is applied within an appropriate context. Not all dictionaries, however, define words the same and not all parts of this country apply the same meanings to all words. The dictionary referenced in this section provides a standardized resource for defining terms and establishing "ordinarily accepted" meanings of words, thus reducing the likelihood of inconsistent enforcement of the code.

Some terms used throughout the code may not be defined in Chapter 2 or in a dictionary. In those cases, the user should first turn to the definitions contained in the referenced standards (see Chapter 80) and then refer to published textbooks on the subject in question.