NFPA 1031
Standard for Professional Qualifications for Fire Inspector

1998 Edition

National Fire Protection Association, 1 Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101
An International Codes and Standards Organization

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NFPA 1031

Standard for

Professional Qualifications for Fire Inspector and Plan Examiner

1998 Edition

This edition of NFPA 1031, *Standard for Professional Qualifications for Fire Inspector and Plan Examiner*, was prepared by the Technical Committee on Fire Inspector Professional Qualifications, released by the Correlating Committee on Professional Qualifications, and acted on by the National Fire Protection Association, Inc. at its Annual Meeting held May 18–21, 1998, in Cincinnati, OH. It was issued by the Standards Council on July 16, 1998, with an effective date of August 5, 1998, and supersedes all previous editions.

This edition of NFPA 1031 was approved as an American National Standard on August 6, 1998.

Origin and Development of NFPA 1031

In 1972, the Joint Council of National Fire Service Organizations (JCNFSO) created the National Professional Qualifications Board (NPQB) for the fire service to facilitate the development of nationally applicable performance standards for uniformed fire service personnel. On December 14, 1972, the board established four technical committees to develop those standards using the National Fire Protection Association (NFPA) standards-making system. The initial committees addressed the following career areas: fire fighter, fire officer, fire service instructor, and fire inspector and investigator.

The original concept of the professional qualification standards, as directed by the JCNFSO and the NPQB, was to develop an interrelated set of performance standards specifically for the uniformed fire service. The various levels of achievement in the standards were to build upon each other within a strictly defined career ladder. In the late 1980s, revisions of the standards recognized that the documents should stand on their own merit in terms of job performance requirements for a given field. Accordingly, the strict career ladder concept was revised except for the progression from fire fighter to fire officer, in order to allow civilian entry into many of the fields. These revisions facilitated the use of the documents by other than the uniformed fire services.

The Committee on Fire Inspector and Investigator Professional Qualifications met from 1973 through 1977 and produced the first edition of NFPA 1031, *Professional Qualifications for Fire Inspector, Fire Investigator, and Fire Prevention Education Officer.* This document was adopted by the Association in May of 1977.

Subsequent to the adoption of the initial edition, the committee met regularly to revise and update the standard. In 1986, the joint council directed the committee to develop separate documents for each of the job functions the original document addressed. This direction was coupled with the decision to remove the job of fire inspector from the strict career path previously followed and allow for civilian entry. The first edition of this new document, NFPA 1031, *Standard for Professional Qualifications for Fire Inspector*, was adopted by the NFPA in June of 1987.

In 1990, responsibility for the appointment of professional qualifications committees and the development of the professional qualifications standards was assumed by the NFPA.

The Professional Qualifications Correlating Committee was appointed by the NFPA Standards Council and assumed the responsibility for coordinating the requirements of all of the professional qualifications documents.

The Technical Committee on Fire Inspector Professional Qualifications was established by the NFPA Standards Council in 1990 based on a recommendation by the Professional Qualifications Correlating Committee. This recommendation addressed the need for specific expertise in the area of fire inspector to review and revise the existing document. This committee completed a job task and analysis and developed specific job performance requirements that are applicable to fire inspectors, both public and private. These requirements were published in the 1993 edition of this document.

For this edition of the standard, the commitee reviewed the job performance requirements for fire inspector I, II, and III and updated them as needed. It added job performance requirements for plan examiner at levels I and II. The title of the standard was changed to *Standard for Professional Qualifications for Fire Inspector and Plan Examiner.* In addition, two new appendixes were added, one with sample job descriptions, the other with an overview of the JPRs for fire inspector and plan reviewer.

Technical Correlating Committee on Professional Qualifications

Douglas P. Forsman, *Chair*
Oklahoma State University, OK [M]

Fred G. Allinson, Nat'l Volunteer Fire Council, WA [L]
Rep. Nat'l Volunteer Fire Council
Stephen P. Austin, State Farm Fire & Casualty Co., DE [I]
Rep. TC on Investigator Pro Qual
(VL to Professional Qualifications Systems Management)
Dan W. Bailey, USDA Forest Service, MT [E]
Rep. TC on Wildfire Suppression Pro Qual [M]
(VL to Professional Qualifications Systems Management)
Boyd F. Cole, SunnyCor Inc., IL [M]
Rep. TC on Emergency Vehicle Mechanic Technicians Pro Qual
(VL to Professional Qualifications Systems Management)
David T. Endicott, Prince William County Fire & Rescue Service, VA [U]
Rep. TC on Fire Fighter Pro Qual
(VL to Professional Qualifications Systems Management)
Jon C. Jones, Jon Jones & Assoc., MA [SE]
Rep. TC Industrial Fire Brigades
(VL to Professional Qualifications Systems Management)
Charles E. Kirtley, Colorado Springs Fire Dept., CO [U]
Rep. TC on Public Fire Educator Pro Qual
(VL to Professional Qualifications Systems Management)
Jack K. McElfish, Richmond Dept. of Fire and Emergency Services, VA [E]
(Rep. Int'l Assn. of Fire Chiefs)
Michael J. McGovern, Pierce County Washington Fire District 2, WA [L]
Rep. Int'l Assn. of Fire Fighters
William E. Peterson, Plano Fire Dept., TX [M]
Rep. TC on Inspector Pro Qual
(VL to Professional Qualifications Systems Management)
Hugh A. Pike, U.S. Air Force Fire Protection, FL [E]
Rep. TC on Rescue Technicians Pro Qual
(VL to Professional Qualifications Systems Management)
Bruce R. Piringer, Fire & Rescue Training Inst., MO [SE]
Rep. TC on Fire Service Instructor Pro Qual
(VL to Professional Qualifications Systems Management)
Ted Vratny, Ted Vratny — Public Safety Communications Consulting, CO [U]
Rep. TC on Telecommunicator Pro Qual
(VL to Professional Qualifications Systems Management)
Alan G. Walker, Louisiana State University, LA [E]
Rep. TC on Officer Pro Qual
(VL to Professional Qualifications Systems Management)
Johnny G. Wilson, Georgia Firefighter Standards & Training Council, GA [E]
Rep. Nat'l Board on Fire Service Professional Qualification
John P. Wolf, University of Kansas, KS [SE]
Rep. TC on Accreditation and Certification
(VL to Professional Qualifications Systems Management)

Alternates

John W. Condon, Nat'l Volunteer Fire Council, OR [L]
(Alt. to F. G. Allinson)
Michael W. Robinson, Baltimore County Fire Dept., MD
(Alt. to J. G. Wilson)

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

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

Committee Scope: This Committee shall have primary responsibility for the management of the NFPA Professional Qualifications Project and documents related to professional qualifications for fire service, public safety, and related personnel.

Technical Committee on Fire Inspector Professional Qualifications

William E. Peterson, *Chair*
Plano Fire Dept., TX [M]
Rep. Int'l Fire Service Training Assn.

Richard W. Carlson, Okolona Fire Dept., KY [U]
William A. Cross, Yale University, CT [U]
Luke Hilton, Wausau HPR Engr, FL [I]
Kurt Hinkle, Laveen Fire Dept., AZ [L]
Jon C. Jones, Jon Jones & Assoc., MA [SE]
Barbara Koffron, Phoenix Fire Dept., AZ [U]
David Linebaugh, Colorado Springs Fire Dept., CO [L]
Maurice M. Pilette, Mechanical Designs Ltd, MA [SE]
Edward P. Plaugher, Arlington County Fire Dept., VA [E]
Mark Riffey, Nat'l Fire Sprinkler Assn., IN [M]
Rep. Nat'l Fire Sprinkler Assn.
Susan Salzman, Neighborhood Services Dept., IL [L]

Alternates

Joseph T. Cavallari, Yale University, CT [U]
(Alt. to W. A. Cross)

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

Committee Scope: This Committee shall have primary responsibility for documents on professional competence required of fire inspectors.

Contents

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Standard for

Professional Qualifications for Fire Inspector and Plan Examiner

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NOTICE: An asterisk (*) following the number or letter designating a paragraph indicates that explanatory material on the paragraph can be found in Appendix A.

Information on referenced publications can be found in Chapter 8 and Appendix B.

Chapter 1 Administration

1-1 Scope. This standard identifies the professional levels of performance required for fire inspectors and plan examiners. It specifically identifies the job performance requirements necessary to perform as a fire inspector or a plan examiner.

1-2* Purpose. The purpose of this standard is to specify in terms of job performance requirements the minimum standards for professional competence for fire inspectors and plan examiners. This standard defines three levels of progression for fire inspector and two levels of progression for plan examiner. This standard does not address management responsibilities, nor is it the intent of this standard to restrict any jurisdiction from exceeding or combining these minimum requirements.

1-3 General.

1-3.1* The Fire Inspector I or Plan Examiner I candidate shall provide evidence of knowledge of characteristics and behavior of fire, fire prevention principles, written and oral communications, public relations, and basic mathematics.

1-3.2* The job performance requirements for each level of progression shall be completed in accordance with recognized practices and procedures or as defined by law or the authority having jurisdiction.

1-3.3 The job performance requirements need not be mastered in the order in which they appear. The local, state/provincial, or federal training programs shall establish the instructional priority and the training program content to prepare individuals to meet the job performance requirements of this standard.

1-3.4* Evaluation of job performance requirements shall be by individuals approved by the authority having jurisdiction.

1-3.5 A person assigned the duties of Fire Inspector I shall meet all of the requirements defined in Chapter 3 prior to being certified as a Fire Inspector I.

1-3.6 A person assigned the duties of Fire Inspector II shall meet all of the requirements defined in Chapter 4 prior to being certified as a Fire Inspector II.

1-3.7* A person assigned the duties of Fire Inspector III shall meet all of the requirements defined in Chapter 5 prior to being certified as a Fire Inspector III.

1-3.8 A person assigned the duties of Plan Examiner I shall meet all of the requirements defined in Chapter 6 prior to being certified as a Plan Examiner I.

1-3.9 A person assigned the duties of Plan Examiner II shall meet all of the requirements defined in Chapter 7 prior to being certified as a Plan Examiner II.

1-3.10 The fire inspector and plan examiner at all levels of progression shall remain current with the origins and limits of their authority, fire protection technology, fire prevention practices, inspection methods, and current applicable codes and standards by attending workshops and seminars, by undergoing certification testing, or by means of professional publications and journals.

1-3.11 The fire inspector and plan examiner at all levels shall perform assigned duties safely. The authority having jurisdiction shall provide personal protective clothing and the equipment necessary to conduct assigned inspections and plan review.

1-3.12* The fire inspector and plan examiner at all levels shall be provided with codes, standards, policies, and procedures applicable to the jurisdiction and the assignment.

1-3.13 The fire inspector and plan examiner at all levels shall complete inspections, plans review duties, and other related activities, so that available time is used efficiently.

Chapter 2 Definitions

2-1* Definitions. For the purpose of this standard, terms shall have the following meanings.

Applicable Codes and Standards. Those codes and standards that are legally adopted and enforced by a jurisdiction at the time of construction of an occupancy or installation of a system or of equipment. These applicable codes and standards can include ordinances, statutes, regulations, or other legal documents adopted by the jurisdiction.

Approved.* Acceptable to the authority having jurisdiction.

Authority Having Jurisdiction.* The organization, office, or individual responsible for approving equipment, an installation, or a procedure.

Candidate. A person who has applied to become a fire inspector or plan examiner.

Construction Documents. Documents that consist of scaled design drawings and specifications for the purpose of construction of new facilities or modification to existing facilities.

Fire Growth Potential. The potential size or intensity of a fire over a period of time based on the available fuel and the fire's configuration.

Fire Inspector I. An individual at the first level of progression who has met the job performance requirements specified in this standard for Level I. The Fire Inspector I conducts basic fire inspections and applies codes and standards.

Fire Inspector II. An individual at the second or intermediate level of progression who has met the job performance requirements specified in this standard for Level II. The Fire Inspector II conducts most types of inspections and interprets applicable codes and standards.

Fire Inspector III. An individual at the third and most advanced level of progression who has met the job performance requirements specified in this standard for Level III. The Fire Inspector III performs all types of fire inspections, plans review duties, and resolves complex code-related issues.

Fire Protection Systems. Systems, devices, and equipment used to detect a fire and its by-products, actuate an alarm, or suppress or control a fire and its by-products, or any combination thereof.

Job Performance Requirement. A statement that describes a specific job task, lists the items necessary to complete the task, and defines measurable or observable outcomes and evaluation areas for the specific task.

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

Listed.* Equipment, materials, or services included in a list published by an organization that is acceptable to the authority having jurisdiction and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets identified standards or has been tested and found suitable for a specified purpose.

Means of Egress. A building system intended to allow building occupants to promptly exit a building in the event of an emergency. Means of egress include the exit access, exit enclosure, exit discharge, doors, hardware, arrangement, capacity, marking, and illumination.

Personal Protective Clothing. Clothing provided for the fire inspector's personal protection, including a helmet/hard hat, safety glasses, safety shoes/boots, gloves, and coveralls.

Plan. A graphic representation of a building or portion of a building, fire protection system, or fire assembly or equipment. The plan can include specifications, cut sheets, and other engineering data. The term includes sketches, site plans, floor plans, shop drawings, and blueprints.

Plan Examiner I. An individual at the first level of progression who has met the job performance requirements specified in this standard for Level I. The Plan Examiner I conducts basic plan reviews and applies codes and standards.

Plan Examiner II. An individual at the second or most advanced level of progression who has met the job performance requirements specified in this standard for Level II. The Plan Examiner II conducts plan reviews and interprets applicable codes and standards.

Process and Operations. Include the manufacture, storage, and transportation of goods and chemicals; the storage and dispensing of flammable and combustible liquids, solids, and gases; and the manufacture, use, storage, and transportation of explosives, spray painting, milling, and the like.

Requisite Knowledge. Fundamental knowledge one must have in order to perform a specific task.

Requisite Skills. The essential skills one must have in order to perform a specific task.

Shall. Indicates a mandatory requirement.

Shop Drawings. Scaled working drawings, equipment cut-sheets, and design calculations. *(See Construction Documents.)*

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

Task. A specific job behavior or activity.

Chapter 3 Fire Inspector I

3-1* General. The Fire Inspector I shall meet the job performance requirements defined in Sections 3-2 through 3-4. In addition, the Fire Inspector I shall meet the requirements of Section 2-2 of NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents.*

3-2 Administration. This duty involves the preparation of correspondence and inspection reports, handling of complaints, and maintenance of records, according to the following job performance requirements.

3-2.1 Prepare written correspondence to communicate fire protection and prevention practices, given a common fire safety issue, so that the correspondence is concise, accurately reflects applicable codes and standards, and is appropriate for the intended audience.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction and policies of the jurisdiction.

(b) *Requisite Skills:* The ability to do code-related research and clearly express code requirements orally and in writing.

3-2.2 Prepare inspection reports, given observations from a field inspection, so that the report is clear and concise and accurately reflects the findings of the inspection in accordance with applicable codes and standards.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction and policies of the jurisdiction.

(b) *Requisite Skills:* The ability to interpret codes and standards, write reports, and communicate verbally and in writing.

3-2.3 Recognize the need for a permit, given a situation or condition, so that requirements for permits are communicated in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Permit policies of the jurisdiction and the rationale for the permit.

(b) *Requisite Skills:* The ability to communicate verbally and in writing.

3-2.4 Recognize the need for plan review, given a situation or condition, so that requirements for plan reviews are communicated in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Plan review policies of the jurisdiction and the rationale for the plan review.

(b) *Requisite Skills:* The ability to communicate verbally and in writing.

3-2.5 Investigate common complaints, given a reported situation or condition, so that complaint information is recorded, the appropriate process is initiated, and the complaint is resolved.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction and policies of the jurisdiction.

(b) *Requisite Skills:* The ability to interpret codes and standards, communicate verbally and in writing, recognize problems, and refer complaints.

3-2.6 Maintain files, given inspection reports, complaint investigations, and related documents, so that information can be easily retrieved and is filed in compliance with the record-keeping policies of the organization.

(a) *Requisite Knowledge:* Legal requirements for record retention, freedom of information requests, community right-to-know laws, and operational procedures of the organization.

(b) *Requisite Skills:* The ability to organize.

3-2.7* Identify the applicable code or standard, given a fire protection, fire prevention, or life safety issue, so that the proper document, edition, and section are referenced.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction.

(b) *Requisite Skills:* The ability to make proper decisions and interpret codes.

3-2.8 Testify at legal proceedings, given the findings of a field inspection or a complaint and consultation with legal counsel, so that all information is presented accurately and the inspector's demeanor is appropriate for the proceeding.

(a) *Requisite Knowledge:* The legal requirements pertaining to evidence rules in the legal system and knowledge of types of legal proceedings.

(b) *Requisite Skills:* The ability to maintain an appropriate courtroom demeanor, communicate, listen, and differentiate facts from opinions.

3-3 Field Inspection. This duty involves fire safety inspections of new and existing structures and properties for construction, occupancy, fire protection, and exposures, according to the following job performance requirements.

3-3.1 Identify the occupancy classification of a single-use occupancy, given a description of the occupancy and its use, so that an accurate classification is made according to the applicable codes and standards.

(a) *Requisite Knowledge:* Occupancy classification types; applicable codes, regulations, and standards adopted by the jurisdiction; operational features; and fire hazards presented by various occupancies.

(b) *Requisite Skills:* The ability to make observations and proper decisions.

3-3.2 Compute the allowable occupant load of a single-use occupancy or portion thereof, given a detailed description of the occupancy, so that the calculated allowable occupant load is established in accordance with applicable codes and standards.

(a) *Requisite Knowledge:* Occupancy classification types; applicable codes, regulations, and standards adopted by the jurisdiction; operational features; fire hazards presented by various occupancies; and occupant load factors.

(b) *Requisite Skills:* The ability to mathematically calculate accurate occupant loads, identify occupancy factors related to various occupancy types, use measuring tools, make field sketches, and use a calculator.

3-3.3* Inspect means of egress elements, given observations made during a field inspection of an existing building, so that means of egress elements are maintained in compliance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction related to means of egress elements, maintenance requirements of egress elements, types of construction, occupancy egress requirements, and the relationship of fixed fire protection systems to egress requirements, and to acceptable means of egress, including but not limited to doors, hardware, and lights.

(b) *Requisite Skills:* The ability to observe and recognize problems, calculate, make basic decisions related to means of egress, use measuring tools, make field sketches, and write reports.

3-3.4* Verify the type of construction for an addition or remodeling project, given field observations or a description of the project and the materials being used, so that the construction type is classified and recorded in accordance with the applicable codes and standards and the policies of the jurisdiction.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction, types of construction classification, rated construction components, and accepted building construction methods and materials.

(b) *Requisite Skills:* The ability to read plans, make decisions, and interpret codes.

3-3.5* Determine the operational readiness of existing fixed fire suppression systems, given test documentation and field observations, so that the system(s) is in an operational state, maintenance is documented, and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* A basic understanding of the components and operation of fixed fire suppression systems and applicable codes and standards.

(b) *Requisite Skills:* The ability to observe, make decisions, recognize problems, and read reports.

3-3.6* Determine the operational readiness of existing fire detection and alarm systems, given test documentation and field observations, so that the systems are in an operational state, maintenance is documented, and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* A basic understanding of the components and operation of fire detection and alarm systems and devices and applicable codes and standards.

(b) *Requisite Skills:* The ability to observe, make decisions, recognize problems, and read reports.

3-3.7* Determine the operational readiness of existing portable fire extinguishers, given field observations and test documentation, so that the equipment is in an operational state, maintenance is documented, and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* A basic understanding of portable fire extinguishers, components, and placement and applicable codes and standards.

(b) *Requisite Skills:* The ability to observe, make decisions, recognize problems, and read reports.

3-3.8* Recognize hazardous conditions involving equipment, processes, and operations, given field observations, so that the equipment, processes, or operations are conducted and maintained in accordance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Practices and techniques of code compliance inspections, fire behavior, fire prevention practices, ignition sources, safe housekeeping practices, and classification of hazardous materials.

(b) *Requisite Skills:* The ability to observe, communicate, interpret codes, recognize problems, and make decisions.

3-3.9 Compare an approved plan to an installed fire protection system, given approved plans and field observations, so that any modifications to the system are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Fire protection symbols and terminology.

(b) *Requisite Skills:* The ability to read and comprehend plans for fire protection systems, observe, communicate, interpret codes, recognize problems, and make decisions.

3-3.10* Verify that emergency planning and preparedness measures are in place and have been practiced, given field observations, copies of emergency plans, and records of exercises, so that plans are prepared and exercises have been performed in accordance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Requirements relative to emergency evacuation drills that are required within the jurisdiction, identification of ways to conduct and/or evaluate fire drills in various occupancies, and human behavior during fires and emergencies.

(b) *Requisite Skills:* The ability to identify the emergency evacuation requirements contained in the applicable codes and standards and interpret plans and reports.

3-3.11 Inspect emergency access for a site, given field observations, so that the required access for emergency responders is maintained or so that deficiencies are identified, documented, and corrected in accordance with the applicable codes, standards, and policies of the jurisdiction.

(a) *Requisite Knowledge:* Applicable codes and standards, the policies of the jurisdiction, and emergency access and accessibility requirements.

(b) *Requisite Skills:* The ability to identify the emergency access requirements contained in the applicable codes and standards, observe, make decisions, and use measuring tools.

3-3.12* Verify code compliance for incidental storage, handling, and use of flammable and combustible liquids and gases, given field observations and inspection guidelines from the authority having jurisdiction, so that applicable codes and standards are addressed and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Classification, properties, labeling, storage, handling, and use of incidental amounts of flammable and combustible liquids and gases.

(b) *Requisite Skills:* The ability to observe, communicate, interpret codes, recognize problems, and make decisions.

3-3.13* Verify code compliance for incidental storage, handling, and use of hazardous materials, given field observations, so that applicable codes and standards for each hazardous material encountered are properly addressed and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Classification, properties, labeling, transportation, storage, handling, and use of hazardous materials.

(b) *Requisite Skills:* The ability to observe, communicate, interpret codes, recognize problems, and make decisions.

3-3.14 Recognize a hazardous fire growth potential in a building or space, given field observations, so that the hazardous conditions are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Basic fire behavior, flame spread and smoke development ratings of contents, interior finishes, building construction elements, decorations, decorative materials, and furnishings, and safe housekeeping practices.

(b) *Requisite Skills:* The ability to observe, communicate, interpret codes, recognize hazardous conditions, and make decisions.

3-4 Plans Review. There are no job performance requirements for Fire Inspector I.

Chapter 4 Fire Inspector II

4-1 General. The Fire Inspector II shall meet the job performance requirements defined in Sections 4-2 through 4-4.

4-2 Administration. This duty involves research, interpretation of codes, implementing policy, testifying at legal proceedings, and creating forms and job aids, according to the following job performance requirements.

4-2.1 Develop written correspondence to communicate fire protection and prevention requirements, given a complex fire safety issue, so that the correspondence reflects research and accurate interpretation of applicable codes and standards and is appropriate for the intended audience.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction and the interrelationship between those codes and regulations, and various sources for additional reference materials related to code enforcement.

(b) *Requisite Skills:* Familiarity with code-related research and the ability to clearly express code requirements verbally and in writing.

4-2.2 Create inspection checklists and forms, given applicable codes, standards, policies, and procedures of the jurisdiction, so that the materials developed are clear and concise and key issues are addressed.

(a) *Requisite Knowledge:* Inspection elements required by codes, standards, policies, and procedures of the jurisdiction.

(b) *Requisite Skills:* The ability to clearly express code requirements of the jurisdiction in writing and organize code inspection elements in a logical and complete format for

use as a guide to perform uniform and effective fire code inspections.

4-2.3 Process a permit application, given a specific request, so that the application is evaluated and a permit is issued or denied in accordance with the applicable codes, standards, policies, and procedures of the jurisdiction.

(a) *Requisite Knowledge:* Permit application process and applicable codes, standards, policies, and procedures of the jurisdiction.

(b) *Requisite Skills:* The ability to communicate verbally and in writing.

4-2.4 Process a plan review application, given a specific request, so that the application is evaluated and processed in accordance with the applicable policies and procedures of the jurisdiction.

(a) *Requisite Knowledge:* Plan review application process, code requirements of the jurisdiction, and policies and procedures of the jurisdiction.

(b) *Requisite Skills:* The ability to communicate verbally and in writing on matters related to code requirements, policies, and procedures of the jurisdiction.

4-2.5 Testify at legal proceedings, given the findings of a plan review and consultation with legal counsel, so that all information is presented accurately and the inspector's demeanor is appropriate to the proceeding.

(a) *Requisite Knowledge:* The legal requirements pertaining to evidence rules in the legal system and knowledge of types of legal proceedings.

(b) *Requisite Skills:* Familiarity with courtroom demeanor, communication, and listening skills and the ability to differentiate facts from opinions.

4-2.6 Investigate complex complaints, given a reported situation or condition, so that complaint information is recorded, the appropriate process is initiated, and the complaint is resolved.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction and policies of the jurisdiction.

(b) *Requisite Skills:* The ability to interpret codes and standards, communicate verbally and in writing, recognize problems, and refer complaints.

4-2.7 Recommend modifications to codes and standards of the jurisdiction, given a fire safety issue, so that the proposed codes and standards are properly written and address the problem, need, or deficiency.

(a) *Requisite Knowledge:* State statutes or local ordinances establishing or empowering the agency to adopt, enforce, and revise codes and standards; the legal instruments establishing or adopting codes and standards; and the development and adoption process for fire and life safety legislation or regulations.

(b) *Requisite Skills:* The ability to recognize problems, communicate, and identify cost/risk benefits.

4-2.8 Recommend policies and procedures for the delivery of inspection services, given management objectives, so that inspections are carried out in accordance with the policies of the jurisdiction and due process of the law is followed.

(a) *Requisite Knowledge:* Policies and procedures of the jurisdiction related to code enforcement, and sources of detailed and technical information relating to fire protection and life safety.

(b) *Requisite Skills:* The ability to identify acceptable construction methods and materials related to fire safety, read and interpret construction plans and specifications, communicate verbally and in writing, educate, conduct research, make decisions, recognize problems, and resolve conflicts.

4-3 Field Inspection. This duty involves code enforcement inspections and analyses of new and existing structures and properties for construction, occupancy, fire protection, and exposures, according to the following job requirements.

4-3.1 Compute the occupant load of a multiuse building, given field observations or a description of its uses, so that the maximum occupant load calculation is accurate and in accordance with applicable codes and standards.

(a) *Requisite Knowledge:* How to calculate occupant loads for an occupancy and for building use; and code requirements, regulations, operational features, and fire hazards presented by various occupancies.

(b) *Requisite Skills:* The ability to mathematically calculate accurate occupant loads, identify occupancy factors related to various occupancy types, use measuring tools, read plans, and use a calculator.

4-3.2 Identify the occupancy classification of a mixed-use building, given a description of the uses, so that each area is properly classified in accordance with applicable codes and standards.

(a) *Requisite Knowledge:* Occupancy classification types, applicable codes and standards, operational features, and fire hazards presented by various occupancies.

(b) *Requisite Skills:* The ability to interpret code requirements and recognize building uses that fall into each classification of occupancy types.

4-3.3 Determine the type of construction in a new building, given plan review and observations or a description of the building's height, area, occupancy, and construction features, so that the construction type is properly classified according to applicable codes and standards.

(a) *Requisite Knowledge:* Building construction with emphasis on fire-rated construction, evaluation of methods of construction and assemblies for fire rating, analysis of test results, and manufacturer's specifications.

(b) *Requisite Skills:* The ability to identify characteristics of each type of building construction.

4-3.4* Evaluate fire protection systems and equipment provided for the protection of a building or facility, given field observations of the facility and documentation, the hazards protected, and the system specifications, so that the fire protection systems provided are appropriate for the occupancy or hazard being protected and are installed in compliance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Applicable codes and standards for fire protection systems, basic physical science as it relates to fire behavior and fire suppression, installation techniques and acceptance inspection, testing and reports of maintenance of completed installations, and use and function of various systems.

(b) *Requisite Skills:* The ability to recognize problems, use codes and standards, and read reports, plans, and specifications.

4-3.5 Analyze the egress elements of a building or portion of a building, given observations made during a field inspection, so that means of egress elements are provided and located in accordance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Acceptable means of egress devices.

(b) *Requisite Skills:* The ability to calculate egress requirements, read plans, and make decisions related to the adequacy of egress.

4-3.6* Evaluate hazardous conditions involving equipment, processes, and operations, given field observations and appropriate documentation, so that the equipment, processes, or operations are installed in accordance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Applicable codes and standards, accepted fire protection practices, fire behavior, ignition sources, safe housekeeping practices, and additional reference materials related to code enforcement.

(b) *Requisite Skills:* The ability to observe, communicate, interpret codes, recognize problems, and make decisions.

4-3.7 Evaluate emergency planning and preparedness procedures, given copies of existing or proposed plans and procedures, to determine their applicability to the facility and their compliance with codes and standards.

(a) *Requisite Knowledge:* Occupancy requirements for emergency evacuation plans, fire safety programs for crowd control, roles of agencies and individuals in implementation and development of emergency evacuation plans, and information sources for emergency evacuation plans.

(b) *Requisite Skills:* The ability to compare submitted plans and procedures with applicable codes and standards adopted by the jurisdiction.

4-3.8 Verify fire flows for a site, given fire flow test results and water supply data, so that required fire flows are in accordance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Identify the types of water distribution systems and other water sources in the local community, water distribution system testing, characteristics of public and private water supply systems, and flow testing procedures.

(b) *Requisite Skills:* The ability to use Pitot tube and gauges and calculate and graph fire flow results.

4-3.9 Verify code compliance for storage, handling, and use of flammable and combustible liquids and gases, given field observations and inspection guidelines from the authority having jurisdiction, so that applicable codes and standards are addressed and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Flammable and combustible liquids properties and hazards, material safety data sheet, safe handling practices, appropriate codes and standards, fire protection systems and equipment appropriate for the material, fire behavior, safety procedures, and storage compatibility.

(b) *Requisite Skills:* The ability to identify typical fire hazards associated with processes or operations utilizing flammable and combustible liquids and observe, communicate, interpret codes, recognize problems, and make decisions.

4-3.10 Evaluate code compliance for the storage, handling, and use of hazardous materials, given field observations, so that applicable codes and standards for each hazardous material encountered are properly addressed and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Hazardous materials properties and hazards, material safety data sheet, safe handling practices, appropriate codes and standards, fire protection systems and equipment appropriate for the material, fire behavior, safety procedures, chemical reactions, and storage compatibility.

(b) *Requisite Skills:* The ability to identify typical fire hazards associated with processes or operations utilizing hazardous materials and observe, communicate, interpret codes, recognize problems, and make decisions.

4-3.11 Determine fire growth potential in a building or space, given field observations or plans, so that the contents, interior finish, and construction elements can be evaluated for compliance with applicable codes and standards and all deficiencies are identified, documented, and corrected in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Basic fire behavior, decorations, decorative materials, furnishings, and safe housekeeping practices.

(b) *Requisite Skills:* The ability to observe, communicate, interpret codes, recognize hazardous conditions, and make decisions.

4-3.12 Inspect emergency access for a site, given field observations, so that the required access for emergency responders is provided, approvals are issued, or deficiencies are identified, documented, and corrected in accordance with the applicable codes, standards, and policies of the jurisdiction.

(a) *Requisite Knowledge:* Applicable codes and standards, policies of the jurisdiction, and emergency access and accessibility requirements.

(b) *Requisite Skills:* The ability to identify emergency access requirements contained in the applicable codes and standards and observe, make decisions, and use measuring tools.

4-4 Plans Review. This duty involves field verification of shop drawings, plans, and construction documents to ensure that they meet the intent of applicable codes and standards for fire and life safety, according to the following job performance requirements.

4-4.1 Classify the occupancy type, given a set of plans, specifications, and a description of a building, so that the classification is made according to applicable codes and standards.

(a) *Requisite Knowledge:* Occupancy classification types, applicable codes and standards, regulations, operational features, and fire hazards presented by various occupancies.

(b) *Requisite Skills:* The ability to read plans.

4-4.2 Compute the occupant load, given a floor plan of a building or portion of the building, so that the calculated

occupant load is in accordance with applicable codes and standards.

(a) *Requisite Knowledge:* How to calculate occupant loads for an occupancy and building use, code requirements, regulations, operational features, and fire hazards presented by various occupancies.

(b) *Requisite Skills:* The ability to mathematically calculate accurate occupant loads, identify occupancy factors related to various occupancy types, use measuring tools, read plans, and use a calculator.

4-4.3 Field verify the installation of a fire protection system, given shop drawings and system specifications for a process or operation, so that the system is reviewed for code compliance and installed in accordance with the approved drawings, and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Proper selection, distribution, location, and testing of portable fire extinguishers; methods used to evaluate the operational readiness of water supply systems used for fire protection; evaluation and testing of automatic sprinkler, water spray, and standpipe systems and fire pumps; evaluation and testing of fixed fire suppression systems including CO_2, Halon, foam, and dry chemical; evaluation and testing of automatic fire detection and alarm systems and devices.

(b) *Requisite Skills:* The ability to read basic floor plan or shop drawings and identify symbols used by the jurisdiction.

4-4.4 Verify that egress elements are provided, given a floor plan of a building or portion of a building, so that all elements are identified and checked against applicable codes and standards and any deficiencies are discovered and communicated in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction, the identification of standard symbols used in plans, and field verification practices.

(b) *Requisite Skills*: The ability to read plans and research codes and standards.

4-4.5 Field verify the construction type of a building or portion thereof, given a set of approved plans and specifications, so that the construction type complies with the approved plans and applicable codes and standards.

(a) *Requisite Knowledge:* Building construction with emphasis on fire-rated construction, evaluation of methods of construction and assemblies for fire rating, analysis of test results, and manufacturer's specifications.

(b) *Requisite Skills:* The ability to identify characteristics of each type of building construction.

Chapter 5 Fire Inspector III

5-1 General. The Fire Inspector III shall meet the job performance requirements defined in Sections 5-2 through 5-3.

5-2 Administration. This duty involves the recommendation, creation, and evaluation of policies and procedures for fire safety inspections and code enforcement activities, according to the following job performance requirements.

5-2.1 Generate written correspondence related to the issuance of appeals and variances, given a request for a variance or an appeal, so that the resulting document clearly addresses the issue and is appropriate for the intended audience.

(a) *Requisite Knowledge:* The established procedure for modification of applicable codes and standards, the judicial review process, and the established appeals procedure for the jurisdiction.

(b) *Requisite Skills:* The ability to interpret codes and standards, communicate requirements, make decisions, listen, read reports and plans, evaluate, and issue written reports.

5-2.2 Facilitate code adoption and modification processes, given fire loss data and a demonstrated need or deficiency, so that the code is properly written and precisely addresses the identified need or deficiency.

(a) *Requisite Knowledge:* The development and adoption process for fire safety legislation or regulations.

(b) *Requisite Skills:* The ability to compose legally adoptable language, recognize problems, make observations, and communicate to legislative authority.

5-2.3 Assess the impact of proposed codes, ordinances, and other legislation, given draft documents, so that the impact of the proposal on fire safety and code enforcement activities is documented.

(a) *Requisite Knowledge:* The process for the development of codes and standards at the local, state/provincial, and national level, and sources that can provide information and technical assistance in the development of fire safety legislation.

(b) *Requisite Skills:* The ability to recognize problems, communicate, and identify cost/risk benefit.

5-2.4 Develop policies and procedures for the administration of inspection functions, given management objectives, so that the policies are clearly defined and concise and in accordance with the legal obligations of the jurisdiction.

(a) *Requisite Knowledge:* Legal precedence and the various systems of government that affect the performance of the fire inspector's duties, how to read blueprints and identify symbols related to construction plans and specifications, policies and procedures of the jurisdiction related to code enforcement and plans review, sources of detailed and technical information relative to plans and specifications.

(b) *Requisite Skills:* The ability to identify acceptable construction methods and materials related to fire safety, read and interpret construction plans and specifications, communicate verbally and in writing, and educate, research, make decisions, recognize problems, and resolve conflicts.

5-2.5 Suggest technical reference material acquisition, given a scope of responsibility, budget limitations, and specific code-related issues, so that resources matching specific needs are acquired within budget limitations.

(a) *Requisite Knowledge:* Types and sources of publications, including approval and listings guides, codes and standards, and technical references.

(b) *Requisite Skills:* The ability to recognize the need for materials, identify correct materials, calculate budget impact, and make decisions regarding priorities.

5-2.6 Enforce permit regulations, given a report of a violation, so that revocation decisions are in accordance with the policies of the jurisdiction and applicable codes and standards.

(a) *Requisite Knowledge:* Legal authority for permit issuance and revocation, and applicable codes and standards adopted by the jurisdiction.

(b) *Requisite Skills:* The ability to communicate, make decisions, evaluate consequences of improper enforcement, and evaluate skills of others.

5-2.7 Enforce plan review regulations, given a report of a violation, so that corrective action is taken in accordance with the policies of the jurisdiction and applicable codes and standards.

(a) *Requisite Knowledge:* Legal authority for review and applicable codes and standards adopted by the jurisdiction.

(b) *Requisite Skills:* The ability to communicate, make decisions, evaluate consequences of improper enforcement, and evaluate skills of others.

5-2.8 Initiate legal action related to a fire code violation, given a description of a violation and a legal opinion, so that the action taken is in accordance with the policies of the jurisdiction and due process of law is followed.

(a) *Requisite Knowledge:* Legal procedure for fire code enforcement and authority and limitations of police powers.

(b) *Requisite Skills:* The ability to communicate and write reports.

5-2.9 Recommend a program budget, given organizational goals, budget guidelines, and organizational needs, so that overall program needs are addressed within budget guidelines.

(a) *Requisite Knowledge:* Budget procedures of the jurisdiction, revenue sources, and funding mechanisms.

(b) *Requisite Skills:* The ability to recognize problems, measure cost/benefit, identify additional resources, communicate, and write reports.

5-2.10 Evaluate the completion and correctness of inspection reports and completed forms and checklists, given applicable codes, standards, policies, and procedures of the jurisdiction, so that the information contained in the report forms and checklists is correct, clear, and concise and key issues are addressed in compliance with applicable codes, standards, and policies.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction and the interrelationship between those codes and regulations, and various sources for additional reference materials related to code enforcement.

(b) *Requisite Skills:* Familiarity with code-related research and the ability to compare code requirements of a jurisdiction with prepared reports and provide corrective information or correction where necessary.

5-2.11 Design a filing system, given inspection requirements and needs, fire code complaints, and related documents, so that information can be efficiently maintained and retrieved and is maintained in accordance with the record-keeping process of the jurisdiction and state and federal requirements.

(a) *Requisite Knowledge:* Legal requirements for record retention, freedom of information requests, community right-to-know laws, and operational procedures of the organization.

(b) *Requisite Skills:* The ability to plan and organize.

5-3 Field Inspection. This duty involves analysis of code compliance alternatives; evaluation of construction, occupancy, fire protection, and exposures; and emergency planning, according to the following job performance requirements.

5-3.1 Assess alternative methods to adjust occupant loads, given a description of an area, building, or portion of a building and its intended use, so that the permitted occupant load is in accordance with applicable codes and standards.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction, construction types, occupancy requirements, means of egress requirements, and the evaluation of evacuation plan procedures.

(b) *Requisite Skills:* The ability to evaluate evacuation plan procedures, make decisions, read plans and reports, interpret codes and standards, and analyze performance-based reports.

5-3.2 Evaluate corrective measures, given a list of means of egress deficiencies in a building and the proposed correction, so that each deficiency and its proposed correction are evaluated for compliance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction, construction types, occupancy requirements, and means of egress requirements.

(b) *Requisite Skills:* The ability to make decisions, read plans and reports, interpret codes and standards, and analyze performance-based reports.

5-3.3 Evaluate the construction type required for an addition or remodeling project, given a description of the building and its use, so that the construction type is evaluated based on applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction, construction types, occupancy requirements, construction methods, policies, and procedures.

(b) *Requisite Skills:* The ability to recognize problems and read reports and plans.

5-3.4 Evaluate alternative protection measures of equipment, operations, and processes, given deficiencies noted during a field inspection of a facility and proposed alternative methods, so that the equipment, process, or operation is provided with a level of protection that is in compliance with the intent of applicable codes and standards.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction, hazards of the process or operation, fire protection systems required, inherent hazards, and safety precautions necessary.

(b) *Requisite Skills:* The ability to make observations, recognize problems, and resolve conflicts.

5-3.5 Evaluate fire protection plans and practices, given a field report describing a facility housing a complex process or operation, so that the fire growth potential for all areas is determined, the level of protection is appropriate to the hazard, and applicable codes and standards are met.

(a) *Requisite Knowledge:* Fire behavior, fire growth potential, protection, scenarios, and evacuation procedures.

(b) *Requisite Skills:* The ability to observe, recognize problems, and evaluate hazards.

5-3.6 Recommend criteria for the development of emergency planning and procedures, given a description of a building and its use, so that plans and procedures are in compliance with applicable codes and standards.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction; purpose, use, and applicability of evacuation plans; and human behavior.

(b) *Requisite Skills:* The ability to read plans and reports and recognize problems.

5-3.7 Evaluate alternative compliance measures for the storage, handling, and use of hazardous materials, given field inspection reports and proposed alternative compliance measures, so that the hazardous materials are provided with a level of safety that is in compliance with the intent of applicable codes and standards.

(a) *Requisite Knowledge:* Other agencies that have requirements and jurisdiction related to hazardous material.

(b) *Requisite Skills:* The ability to observe, recognize problems, communicate, read plans and reports, and read material safety data sheets.

5-3.8 Evaluate alternative compliance measures for the storage, handling, and use of flammable or combustible liquids and gases, given field inspection reports and proposed alternative compliance measures, so that the storage, handling, and use is provided with a level of safety that is in compliance with the intent of applicable codes and standards.

(a) *Requisite Knowledge:* Properties and hazards of flammable and combustible liquids and gases, material safety data sheet, safe handling practices, appropriate codes and standards, fire protection systems and equipment appropriate for the material, fire behavior, safety procedures, and other agencies that have requirements and jurisdiction related to flammable and combustible liquids and gases, chemical reactions, and storage compatibility.

(b) *Requisite Skills:* The ability to observe, recognize problems, communicate, read plans and reports, and read material safety data sheets.

5-3.9 Verify code compliance of heating, ventilation, air conditioning, and other building service equipment and operations, given field observations, so that the systems and other equipment are maintained in accordance with applicable codes and standards, and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Types, installation, maintenance, and use of building service equipment; operation of smoke and heat vents; installation of kitchen cooking equipment (including hoods and ducts), laundry chutes, elevators and escalators; and applicable codes and standards adopted by the jurisdiction.

(b) *Requisite Skills:* The ability to observe, recognize problems, interpret codes and standards, and write reports.

5-3.10* Witness an acceptance test for an integrated fire protection system, given an installed system, so that the test is conducted in accordance with applicable codes and standards and the system performance can be evaluated for compliance and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Acceptance test procedures and appropriate codes and standards.

(b) *Requisite Skills:* The ability to supervise the performance of acceptance tests.

5-3.11 Determine fire growth potential in a building or space, given field observations or a plans submittal, so that the contents, interior finish, and construction elements can be evaluated for compliance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Basic fire behavior, flame spread and smoke development ratings of contents, interior finishes, building construction elements, decorations, decorative materials, and furnishings, and safe housekeeping practices.

(b) *Requisite Skills:* The ability to observe, communicate, interpret codes, recognize hazardous conditions, and make decisions.

5-3.12 Develop emergency access criteria, given the jurisdiction's emergency fire apparatus and fire suppression standard operating procedures, so that fire suppression services can be delivered in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Emergency access and accessibility requirements and performance specifications related to access of emergency vehicles of the jurisdiction.

(b) *Requisite Skills:* The ability to identify emergency access requirements contained in the applicable codes and standards, observe, make decisions, and use measuring tools.

Chapter 6 Plan Examiner I

6-1 General. The Plan Examiner I shall meet the job performance requirements defined in Sections 6-2 through 6-3.

6-2 Administration. This duty involves the preparation of correspondence and plan review reports, handling of complaints, and maintenance of records, as well as identifying when additional expertise is required and being familiar with procedures used by the jurisdiction to evaluate alternative methods, according to the following job performance requirements.

6-2.1 Develop written correspondence to communicate fire protection and fire and life safety code requirements, given a plan review issue, so that the correspondence provides an accurate interpretation of applicable codes and standards and is appropriate for the intended audience.

(a) *Requisite Knowledge:* Fire and life safety principles and practices, administrative procedures, applicable codes and standards adopted by the jurisdiction and the interrelationship between those codes and regulations, and various sources for additional reference materials related to code enforcement.

(b) *Requisite Skills:* The ability to manage time, communicate, perform code-related research, and clearly express code requirements in writing.

6-2.2 Prepare reports, given observations from a plan review, so that the report is clear, concise, and accurately reflects the findings of the plan review in accordance with applicable codes and standards and the policies and procedures of the jurisdiction.

(a) *Requisite Knowledge:* Codes and standards, legal requirements for plan review reports, and accepted practices, policies, and procedures of the jurisdiction.

(b) *Requisite Skills:* The ability to conduct code-related research, write reports, and communicate verbally and in writing.

6-2.3 Communicate the process for plan submittal and review to the design professional, given an inquiry, so that the information is complete and accurate and provided in accordance with the policies and procedures of the jurisdiction.

(a) *Requisite Knowledge:* Plan review policies of the jurisdiction, codes and standards, legal and administrative requirements of the jurisdiction related to the qualifications of individuals who develop plans and specifications, and state and local ordinances regarding licensing.

(b) *Requisite Skills:* The ability to communicate verbally and in writing.

6-2.4 Facilitate the resolution of deficiencies identified during the plan review, given a submittal and the established practices and procedures of the jurisdiction, so that deficiencies are identified, documented, and reported to the plan submitter with applicable references to codes and standards, and alternative methods for compliance are identified.

(a) *Requisite Knowledge:* Policies and procedures of the jurisdiction regarding the communication of discrepancies, the appeals process, and codes and standards.

(b) *Requisite Skills:* The ability to communicate verbally and in writing.

6-2.5* Process plan review documents, given a set of plans and specifications, so that required permits are issued in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Plan review policies and procedures of the jurisdiction.

(b) *Requisite Skills:* The ability to review completed applications for completeness, execute policies and procedures, and communicate verbally and in writing concerning the plan review policies and procedures of the jurisdiction.

6-2.6 Maintain files, given plans and related documents, so that information can be easily retrieved and is filed in compliance with the record-keeping policies of the organization.

(a) *Requisite Knowledge:* Legal requirements for record retention, freedom of information requests, and operational procedures of the organization.

(b) *Requisite Skills:* The ability to organize.

6-2.7 Determine the applicable code or standard, given a fire protection issue, so that the proper document, edition, and section are referenced.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction, format of codes and standards, interrelationship of codes and standards, and procedures adopted by the organizations responsible for promulgating these documents.

(b) *Requisite Skills:* The ability to conduct code-related research, interpret codes, and make decisions.

6-3 Plan Review. This duty involves the review and approval of plans and construction documents for site plans, tents and membrane structures, special amusement structures, exhibits, trade shows, and temporary structures, to ensure that they meet the intent of applicable codes and standards for fire and life safety, according to the following job requirements.

6-3.1 Verify code compliance, given a set of plans for a tent or membrane structure, special amusement structure, exhibit, trade show, or temporary structure, so that all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Applicable code requirements for tents, membrane structures, special amusement structures, exhibits, trade shows, and temporary structures, and third-party testing and evaluation.

(b) *Requisite Skills:* The ability to read basic floor plans or shop drawings and identify symbols used by the jurisdiction, apply codes and standards, and communicate verbally and in writing.

6-3.2 Verify the classification of the occupancy type, given a set of plans, specifications, and a description of a building and its intended use, so that the classification is made according to applicable codes and standards.

(a) *Requisite Knowledge:* Occupancy classification types and applicable codes and standards, regulations, operational features, and fire hazards presented by various occupancies.

(b) *Requisite Skills:* The ability to read plans.

6-3.3 Verify the classification of the construction type, given a site plan and building construction documents, including the proposed area, height, number of stories, and location, so that the proposed building is properly classified in accordance with applicable codes and standards and deficiencies are identified, documented, and reported.

(a) *Requisite Knowledge:* Types of construction classification, fire-rated construction components, typical building construction methods and materials, and code requirements related to construction types.

(b) *Requisite Skills:* The ability to read plans, determine construction classification, communicate, and conduct code-related research.

6-3.4 Verify the occupant load, given a plan, so that the calculated occupant load is in accordance with applicable codes and standards.

(a) *Requisite Knowledge:* Calculate occupant loads for an occupancy and for building use, code requirements, regulations, operational features, and fire hazards presented by various occupancies.

(b) *Requisite Skills:* The ability to mathematically calculate accurate occupant loads, identify occupancy factors related to various occupancy types, use measuring tools, read plans, and use a calculator.

6-3.5 Verify that adequate egress is provided, given a set of plans for a tent or membrane structure, special amusement structure, exhibit, trade show, or temporary structure and an occupant load, so that all required egress elements are provided and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Applicable code requirements for tents, membrane structures, special amusement structures, exhibits, trade shows, and temporary structures, means of egress elements, occupancy egress requirements, and the relationship of fixed fire protection systems to egress requirements.

(b) *Requisite Skills:* The ability to determine egress requirements based on occupant load, read plans, communicate, and research codes.

6-3.6 Evaluate code compliance for required fire flow and hydrant location and spacing, given a site plan, required fire flow, and fire flow test results, so that the required fire flow is

available, hydrants are properly located, and all discrepancies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Standard civil engineering symbols; types of water supply and distribution systems; water distribution system test methods; characteristics of public and private water supply systems, water meters, backflow prevention, and other devices that can impact on fire flow; the effects of friction loss and elevation on water flow; potential impact of state health regulations on fire flow; and the applicable codes and standards related to fire flow in the jurisdiction.

(b) *Requisite Skills:* The ability to read basic plans, communicate, interpret fire flow test results, determine fire hydrant locations and spacing, and read fire flow graphs.

6-3.7 Evaluate code compliance of emergency vehicle access, given a site plan, so that adequate emergency access is provided in accordance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Operating requirements for fire department apparatus, city planning and zoning requirements, and emergency access and accessibility requirements of applicable codes and standards.

(b) *Requisite Skills:* The ability to read plans, communicate, interpret, and use plan scale.

6-3.8 Recommend policies and procedures for the delivery of plan review services, given management objectives, so that plan reviews are carried out in accordance with the policies of the jurisdiction and due process of the law is followed.

(a) *Requisite Knowledge:* Policies and procedures of the jurisdiction related to plan review and sources of detailed and technical information relating to fire protection and life safety.

(b) *Requisite Skills:* The ability to identify acceptable construction methods and materials related to fire safety, read and interpret construction plans and specifications, communicate verbally and in writing, and educate, research, make decisions, recognize problems, and resolve conflicts.

6-3.9 Testify at legal proceedings, given the findings of a plan review and consultation with legal counsel, so that testimony is accurate and the plan reviewer's demeanor is appropriate to the proceeding.

(a) *Requisite Knowledge:* The legal requirements pertaining to evidence rules in the legal system and knowledge of types of legal proceedings.

(b) *Requisite Skills:* Familiarity with courtroom demeanor, communication, and listening skills and the ability to differentiate facts from opinions.

6-3.10 Evaluate code compliance of heating, ventilation, air conditioning, and other building service equipment and operations, given plans and specifications, so that the systems and other equipment are provided in accordance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Types, installation, maintenance, and use of building service equipment, installation of kitchen cooking equipment (including hoods and ducts), laundry chutes, elevators, and escalators, and applicable codes and standards adopted by the jurisdiction.

Chapter 7 Plan Examiner II

7-1 General. The Plan Examiner II shall meet the job performance requirements defined in Sections 7-2 through 7-3.

7-2 Administration. This duty involves research, interpretation of codes, implementing policy, testifying at legal proceedings, and creating forms and job aids, according to the following job performance requirements.

7-2.1 Create plan review checklists and forms, given applicable codes, standards, and departmental policies and procedures, so that the materials developed are clear and concise, address key issues, and clearly express code requirements of the jurisdiction in a logical and complete format.

(a) *Requisite Knowledge:* Plan review elements required by codes, standards, policies, and procedures of the jurisdiction.

(b) *Requisite Skills:* The ability to organize, communicate, and design basic checklists.

7-2.2 Develop policies and procedures for the administration of plan review functions, given management objectives, so that the policies are clearly defined and concise and are in accordance with the legal obligations of the jurisdiction.

(a) *Requisite Knowledge:* Legal precedence and the various systems of government that affect the performance of the plans examiner's duties, jurisdictional requirements and sources of information, and technical assistance in the development of policies and procedures.

(b) *Requisite Skills:* The ability to communicate verbally and in writing, recognize problems, resolve conflicts, and make decisions.

7-2.3 Design a filing system, given plans and related documents, so that information can be efficiently maintained and retrieved and is maintained in accordance with the record-keeping process of the jurisdiction and with state and federal requirements.

(a) *Requisite Knowledge:* Legal requirements for record retention, freedom of information requests, community right-to-know laws, and operational procedures of the organization.

(b) *Requisite Skills:* The ability to plan and organize.

7-3 Plans Review. This duty involves the analysis and approval of plans, specifications, and construction documents for buildings, processes, operations, and fire protection systems and equipment to ensure they meet the intent of applicable codes and standards in accordance with the policies and procedures of the jurisdiction, according to the following job performance requirements.

7-3.1* Evaluate a design concept, given a preliminary design presentation, so that the agreed concept meets the intent of applicable codes and standards in accordance with the policies and procedures of the jurisdiction.

(a) *Requisite Knowledge:* Fire protection construction features, codes and standards, preliminary plan review procedures of the jurisdiction, and the approval process for alternative fire protection methodologies.

(b) *Requisite Skills:* The ability to verify the rating of an assembly using reference materials on fire protection, communicate verbally and in writing, and read plans and specifications.

7-3.2 Evaluate proposed passive fire protection elements of a building or portion of a building, given a set of plans and specifications for a building or facility, so that the protection provided for the facility is in accordance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Fire protection construction features, such as rated assemblies, fire stops, draft stopping, draft curtains, and other passive fire protection features; and fire test methods.

(b) *Requisite Skills:* The ability to verify the rating of an assembly using reference materials and use fire protection reference materials.

7-3.3* Evaluate plans for a process or operation, given plans and specifications, so that the process or operation is reviewed for code or standard compliance and all deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction.

(a) *Requisite Knowledge:* Hazards and applicable standards for arrangement and protection of various operations to be used in commercial and industrial occupancies; construction types; basic physical science as it relates to fire behavior and fire suppression, including mathematics, physics, and chemistry; and knowledge of reference materials related to fire hazard properties of flammable liquids, gases, and volatile solids.

(b) *Requisite Skills:* The ability to review specifications, read plans, and interpret and apply standards.

7-3.4* Evaluate plans for storage, handling, and use of flammable and combustible liquids and gases, given plans and specifications, so that the plans are reviewed for compliance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the applicable codes, standards, policies, and procedures of the jurisdiction.

(a) *Requisite Knowledge:* Properties of flammable and combustible liquids and gases; applicable standards for the handling, storage, arrangement, and protection of flammable and combustible liquids and gases; basic physical science as it relates to fire behavior and fire suppression; and knowledge of reference materials related to flammable and combustible liquids and gases.

(b) *Requisite Skills:* The ability to determine the classification of flammable and combustible liquids and gases using reference materials on fire protection.

7-3.5 Evaluate plans for the installation of fire protection systems, given a submittal of shop drawings and specifications, so that the fire protection systems and equipment are reviewed and all deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction.

(a) *Requisite Knowledge:* Applicable codes and standards for fire protection systems, basic physical science as it relates to fire behavior and fire suppression, basic hydraulic theory, hydraulic calculations for fire suppression, material listing requirements, material specifications, installation techniques, acceptance inspection/testing of completed installations, construction types and techniques, and classification of occupancies.

(b) *Requisite Skills:* The ability to review specifications and read plans, classify occupancies, interpret and apply standards, and verify hydraulic calculations.

7-3.6* Evaluate a proposed alternative method for compliance with applicable codes and standards, given a design that does not meet prescriptive code requirements and supporting documentation of a submittal, so that the design meets the intent of applicable codes and standards.

(a) *Requisite Knowledge:* How a building should perform under adverse conditions in meeting the needs of the jurisdiction, including the objectives and performance requirements reflecting the level of safety required by the jurisdiction or other performance-based regulation for a process or operation.

(b) *Requisite Skills:* The ability to read plans and specifications and comprehend alternative proposals to prescriptive codes and standards.

7-3.7 Evaluate the integration of fire protection systems and life safety systems, given a plan submittal, a life safety report, a sequence of operations report, and testing criteria, so that the integration of proposed systems meets the requirements or intent of the applicable codes and standards and meets the fire and life safety objectives of the jurisdiction and any deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* The fire and life safety objectives of the jurisdiction and fire protection and life safety systems and their integration.

(b) *Requisite Skills:* The ability to evaluate system integration and communicate verbally and in writing.

7-3.8 Evaluate plans for storage, handling, and use of hazardous materials, given plans and specifications, so that the plans are reviewed for compliance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the applicable codes, standards, policies, and procedures of the jurisdiction.

(a) *Requisite Knowledge:* Properties of hazardous materials and applicable standards for handling storage, arrangement, and protection of hazardous materials, basic physical science as it relates to fire behavior and fire suppression, and knowledge of reference materials related to hazardous materials.

(b) *Requisite Skills:* The ability to determine the classification of hazardous materials using reference materials and use fire protection reference materials.

7-3.9 Verify that egress elements are provided, given a plan of a building or portion of a building, so that all egress elements are identified and checked against applicable codes and standards and any deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

(a) *Requisite Knowledge:* Applicable codes and standards adopted by the jurisdiction, identification of standard symbols used in plans, and field verification practices.

(b) *Requisite Skills:* The ability to read plans and research codes and standards.

Chapter 8 Referenced Publications

8-1 The following documents or portions thereof are referenced within this standard as mandatory requirements and shall be considered part of the requirements of this standard.

The edition indicated for each referenced mandatory document is the current edition as of the date of the NFPA issuance of this standard. Some of these mandatory documents might also be referenced in this standard for specific informational purposes and, therefore, are also listed in Appendix B.

8-1.1 NFPA Publication. National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents,* 1997 edition.

Appendix A Explanatory Material

Appendix A is not a part of the requirements of this NFPA document but is included for informational purposes only. This appendix contains explanatory material, numbered to correspond with the applicable text paragraphs.

A-1-2 Management responsibilities should be addressed by the agency or organization that the inspector represents. For fire service organizations, NFPA 1021, *Standard for Fire Officer Professional Qualifications*, should be used for guidance. For civilian inspectors, the authority having jurisdiction should define the agency requirements for progression to positions of management responsibility.

A-1-3.1 To train and work as a fire inspector, the committee has determined that the candidate should possess, at a minimum, basic knowledge of the characteristics and behavior of fire (including basic fire cause determination) and fire prevention principles, as well as skill in written and oral communication, public relations, and basic mathematics (i.e., whole numbers, fractions and decimals, percentages, averages, and estimations, algebraic equations, powers and roots, ratios and proportions, and linear surface and volume measurements). Evidence of this knowledge could be shown by attending training sessions provided by the agency, certificates of training, and documentation of high school or college coursework. It is not the intent of the committee to require college-level coursework as part of this requirement. The authority having jurisdiction should determine the type of evidence and specific levels of preparation for inspectors it employs.

A-1-3.2 It is recommended that the following equipment be provided to the fire inspector to accomplish assigned duties: flashlight, drafting tools (scale, rulers, compass, graph paper, and so forth), tape measure (50 ft), calculator, small mirror, clipboard, photography equipment, Pitot tube, and pressure gauges. Personal protective clothing, such as hard hats, eye protection, boots, coveralls, and so forth, as defined in Chapter 2, should be available as necessary.

A-1-3.4 It is recommended that evaluators be individuals who were not directly involved as instructors for the requirement being evaluated.

A-1-3.7 The intent of the committee is that individuals at the Fire Inspector III level should assist in the training and education of inspectors at lower levels.

A-1-3.12 In order for inspectors to perform their jobs or to be evaluated on their performance of the job requirements of this standard, basic resource materials must be available for reference. These materials include those codes and standards applicable to that jurisdiction where the inspector is working or being evaluated. Policies and procedures that define and regulate the inspector's job must also be provided. This is of particular importance where inspectors are being evaluated by an agency other than their employer. It is the intent of this standard to measure the inspector's ability to use fire codes and standards within the guidelines set by the policies and procedures of a jurisdiction. These skills should be readily transferable, regardless of the specific codes or standards or the editions being used.

A-2-1 Action verbs used in the job performance requirements in this document are based on the first definition of the verb found in *Webster's Third New International Dictionary of the English Language.*

A-2-1 Approved. The National Fire Protection Association does not approve, inspect, or certify any installations, procedures, equipment, or materials; nor does it approve or evaluate testing laboratories. In determining the acceptability of installations, procedures, equipment, or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure, or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization that is concerned with product evaluations and is thus in a position to determine compliance with appropriate standards for the current production of listed items.

A-2-1 Authority Having Jurisdiction. The phrase "authority having jurisdiction" is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the commanding officer or departmental official may be the authority having jurisdiction.

A-2-1 Listed. The means for identifying listed equipment may vary for each organization concerned with product evaluation; some organizations do not recognize equipment as listed unless it is also labeled. The authority having jurisdiction should utilize the system employed by the listing organization to identify a listed product.

A-3-1 The intent of the committee is that individuals at the Fire Inspector I level perform basic fire safety inspections. Individuals at this level can include fire fighters who are normally assigned to fire suppression or other individuals whose primary job responsibilities are not fire inspection.

A-3-2.7 The fire inspector should avoid enforcement of codes or standards that have not been legally adopted by the jurisdiction. The fire inspector should not retroactively apply codes and standards unless legally required by the jurisdiction.

A-3-3.3 Examples of means of egress elements include exit access, exit enclosures, exit discharges, exit travel distances, arrangement, capacity, stairways, ramps, doors, hardware, exit markings, and illumination.

A-3-3.4 A building description includes height and area dimensions, construction type, and construction materials.

A-3-3.5 Individuals should be able to confirm the operational status of fixed extinguishing systems by visual inspection of the control panels for automatic suppression systems such as dry chemical systems, Halon, CO_2, and clean agent systems, visual inspection of control panels for automatic fire pumps and booster pumps, and visual inspection of control panels for detection systems arranged to operate automatic systems. Operational status of sprinkler systems, including wet-pipe, dry-pipe, deluge, foam-water, and preaction systems, can be confirmed by visually inspecting aboveground water supply control valves, by spring testing underground water supply control valves, by inspecting water levels in tanks and reservoirs, and by observing sprinkler system drain tests. Periodic inspections and tests should be documented as noted in the applicable standards (NFPA 11, *Standard for Low-Expansion Foam;* NFPA 12, *Standard on Carbon Dioxide Extinguishing Systems;* NFPA 12A, *Standard on Halon 1301 Fire Extinguishing Systems;* NFPA 17, *Standard for Dry Chemical Extinguishing Systems;* NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems;* NFPA 72, *National Fire Alarm Code;* and NFPA 2001, *Standard on Clean Agent Fire Extinguishing Systems.*)

A-3-3.6 Individuals should be able to confirm the operational status of fire detection systems by visual inspection of the control panels for the detection system. Operational testing, maintenance, and sensitivity testing of detectors, where applicable, should be documented in accordance with NFPA 72, *National Fire Alarm Code®*. To meet this requirement, the Fire Inspector I is required to simply verify that valves are open and secured, control panels are on with no trouble indications, and fire extinguishers or systems are sealed with proper gauge readings. Documentation of maintenance would include inspection tags and records of alarm system and device tests and sprinkler or standpipe main drain tests, and so forth.

A-3-3.7 Individuals should be able to confirm the operational status of extinguishers by visually examining the units, checking gauges, checking that they are tagged and hydrostatically tested in accordance with NFPA 10, *Standard for Portable Fire Extinguishers*, and checking that they are properly located and marked. Extinguishers should also be confirmed to be appropriate for the hazard.

A-3-3.8 The Fire Inspector I is expected to have knowledge of processes and operations that include dust collection, kitchen hood and ducts, dip tanks, spray painting, and flammable and combustible liquids storage, dispensing, and use.

A-3-3.10 Emergency planning and preparation includes fire drills, announcements, evacuation plans, fire department access, response personnel, and standby personnel.

A-3-3.12 It is anticipated that the Fire Inspector I will find nominal amounts of flammable and combustible liquids or gases in occupancies usually considered to be "low-hazard." These liquids and gases are needed for normal maintenance or daily operations and could include cleaning fluids, lubricating oils, or propane for a fork lift. These nominal amounts are referred to as incidental or exempt amounts, depending on the code adopted by the jurisdiction. Once these incidental or exempt amounts are exceeded, additional building and fire requirements are triggered. At this point the inspection should be referred to the Fire Inspector II or III.

A-3-3.13 Moderate amounts of hazardous materials will be found in many occupancies that are not classified as "Hazardous" or "Group H" occupancies. These materials could be on display in a wholesale/retail setting, used for maintenance purposes or operation of equipment, and could include swimming pool or water purification chemicals, refrigeration equipment, or a single chemical process such as a dip tank. These moderate amounts of hazardous materials are referred to as incidental or exempt amounts, depending on the code adopted by the jurisdiction. Once these incidental or exempt amounts are exceeded — whether in storage, use, or wholesale/retail sales — additional building and fire requirements are triggered. At that point the inspection should be referred to the Fire Inspector II or III.

A-4-3.4 Includes buildings under construction or demolition.

A-4-3.6 The Fire Inspector II is expected to have knowledge of processes and operations that include milling and the manufacture, storage, and use of chemicals and explosives.

A-5-3.10 As determined by the jurisdiction, individuals should be able to demonstrate knowledge of the codes and standards related to the installation requirements and acceptance testing requirements for an integrated fire protection and life safety system, such as elevator recall upon activation of a fixed fire alarm system or proper activation and operation of a smoke removal (HVAC) system upon activation of a fire detector and/or suppression system, or other integrated fire protection systems of a similar nature in a structure in accordance with the applicable building, mechanical, and/or fire code of the jurisdiction.

A-6-2.5 The plan examiner should avoid enforcement of codes or standards that have not been legally adopted by the jurisdiction. The plan examiner should not retroactively apply codes and standards unless legally required by the jurisdiction.

A-7-3.1 At this point in the construction process, the design professional should contact the plan examiner to discuss a proposed project before actual plans and specifications are created.

A-7-3.3 As determined by the jurisdiction, individuals should be able to demonstrate knowledge of codes and standards related to special hazards and operations such as, but not limited to, aerosol production, processes using gas- and oil-fired ovens and furnaces, flammable liquids processing such as spray painting and dipping, processing using lasers, pneumatic conveying systems, hazardous location electrical systems, laboratories using chemicals, cleanrooms, or dry-cleaning plants.

A-7-3.4 As determined by the jurisdiction, individuals should be able to demonstrate knowledge of codes and standards related to, but not limited to, flammable and combustible liquid tank farms, inside storage rooms for flammable and combustible liquids, flammable and combustible liquids in warehouses, and storage of liquefied natural gas in tanks.

As determined by the jurisdiction, the Plan Examiner II should be able to demonstrate extensive and detailed knowledge of the installation standards used to install fire alarm systems, fire detection systems, sprinkler systems, fire/booster pumps, suction and gravity tanks, standpipes, underground water supply piping, and special hazard systems for processes that can include those previously listed as well as control/extinguishing systems using clean agents, CO_2, dry chemical, foam, or foam/water solutions. Complex reviews can also be

provided for combinations of the systems integrated to provide life safety and/or fire control or extinguishment, such as smoke evacuation systems in high-rise buildings with standpipes, fire pumps, and sprinkler systems, or explosion or fire suppression in material handling or air-moving systems, such as dust collection systems or chemical vapor removal systems.

One method that the Plan Examiner II can use to demonstrate proficiency with this job performance requirement is valid certification from nationally recognized boards equivalent to the National Institute for Certification in Engineering Technology (NICET), including fire protection engineering technology subfields of automatic sprinkler systems layout, fire alarm systems, and special hazards systems layout.

A-7-3.6 Understanding of fire protection engineering practices and methodologies related to fire modeling and quantitative assessment of designs, including fuel characteristics, loading, arrangements, compartmentation, and the physical and chemical properties of fire, behavior of fire, and properties of combustion is required.

Appendix B Referenced Publications

B-1 The following documents or portions thereof are referenced within this standard for informational purposes only and are thus not considered part of the requirements of this standard unless also listed in Chapter 8. The edition indicated here for each reference is the current edition as of the date of the NFPA issuance of this standard.

B-1.1 NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

NFPA 10, *Standard for Portable Fire Extinguishers,* 1998 edition.

NFPA 11, *Standard for Low-Expansion Foam,* 1998 edition.

NFPA 12, *Standard on Carbon Dioxide Extinguishing Systems,* 1998 edition.

NFPA 12A, *Standard on Halon 1301 Fire Extinguishing Systems,* 1997 edition.

NFPA 17, *Standard for Dry Chemical Extinguishing Systems,* 1998 edition.

NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems,* 1998 edition.

NFPA 72, *National Fire Alarm Code®,* 1996 edition.

NFPA 1021, *Standard for Fire Officer Professional Qualifications,* 1997 edition.

NFPA 2001, *Standard on Clean Agent Fire Extinguishing Systems,* 1996 edition.

B-1.2 Other Publications.

Webster's Third New International Dictionary of the English Language.

Appendix C Job Performance Requirements

This appendix is not a part of the requirements of this NFPA document but is included for informational purposes only.

C-1 Explanation of the Standards and Concepts of Job Performance Requirements (JPRs). The primary benefit of establishing national professional qualification standards is to provide both public and private sectors with a framework of the job requirements for the fire service. Other benefits include enhancement of the profession, individual as well as organizational growth and development, and standardization of practices.

NFPA professional qualification standards identify the minimum JPRs for specific fire service positions. The standards can be used for training design and evaluation, certification, measuring and critiquing on-the-job performance, defining hiring practices, and setting organizational policies, procedures, and goals. (Other applications are encouraged.)

Professional qualification standards for a specific job are organized by major areas of responsibility defined as duties. For example, the fire fighter's duties might include fire suppression, rescue, and water supply, and the public fire educator's duties might include education, planning and development, and administration. Duties are major functional areas of responsibility within a job.

The professional qualification standards are written as JPRs. JPRs describe the performance required for a specific job. JPRs are grouped according to the duties of a job. The complete list of JPRs for each duty defines what an individual must be able to do in order to successfully perform that duty. Together, the duties and their JPRs define the job parameters; that is, the professional qualification standard as a whole is a job description.

C-2 Breaking Down the Components of a JPR. The JPR is the assembly of three critical components. *(See Table C-2.)* These components are as follows:

(a) Task that is to be performed

(b) Tools, equipment, or materials that must be provided to successfully complete the task

(c) Evaluation parameters and/or performance outcomes

The task to be performed. The first component is a concise statement of what the person is supposed to do.

Tools, equipment, or materials that must be provided to successfully complete the task. This component ensures that all individuals completing the task are given the same minimal tools, equipment, or materials when being evaluated. By listing these items, the performer and evaluator know what must be provided in order to complete the task.

Evaluation parameters and/or performance outcomes. This component defines how well one must perform each task — for both the performer and the evaluator. The JPRs guide performance towards successful completion by identifying evaluation parameters and/or performance outcomes. This portion of the JPRs promotes consistency in evaluation by reducing the variables used to gauge performance.

Table C-2 Example of a JPR

(a) Task	(a) Compute the allowable occupant load of a single-use occupancy or portion thereof
(b) Tools, equipment, or materials	(b) Given a detailed description of the occupancy
(c) Evaluation parameters and performance outcomes	(c) So that the calculated allowable occupant load is established in accordance with applicable codes and standards

In addition to these three components, the JPRs contain requisite knowledge and skills. Just as the term requisite suggests, these are the necessary knowledge and skills one must have prior to being able to perform the task. Requisite knowledge and skills are the foundation for task performance.

Once the components and requisites are put together, the JPRs from the fire inspector standard might read as follows.

Example 1. Compute the allowable occupant load of a single-use occupancy or portion thereof, given a detailed description of the occupancy, so that the calculated allowable occupant load is established in accordance with applicable codes and standards.

(a) *Requisite Knowledge:* Occupancy classification types; applicable codes, regulations, and standards adopted by the jurisdiction; operational features; fire hazards presented by various occupancies; and occupant load factors.

(b) *Requisite Skills:* The ability to mathematically calculate accurate occupant loads, identify occupancy factors related to various occupancy types, use measuring tools, read plans, and use a calculator.

Example 2. Interpret burn patterns, given standard equipment and tools and some structural/content remains, so that each individual pattern is evaluated with respect to the burning characteristics of the material involved.

(a) *Requisite Knowledge:* Fire development and the interrelationship of heat release rate, form, and ignitability of materials.

(b) *Requisite Skill:* The ability to interpret the effects of burning characteristics on different types of materials.

C-3 Examples of Potential Uses. *Certification.* JPRs can be used to establish the evaluation criteria for certification at a specific job level. When used for certification, evaluation must be based on the successful completion of JPRs.

First, the evaluator would verify the attainment of requisite knowledge and skills prior to JPRs evaluation. This might be through documentation review or testing.

Next, the candidate would then be evaluated on completing the JPRs. The candidate would perform the task and be evaluated based on the evaluation parameters and/or performance outcomes. This performance-based evaluation can be either practical (for psychomotor skills such as "ventilate a roof") or written (for cognitive skills such as "interpret burn patterns").

NOTE: Psychomotor skills are those physical skills that can be demonstrated or observed. Cognitive skills (or mental skills) cannot be observed but are evaluated on how one completes the task (process oriented) or on the task outcome (product oriented).

Using Example 1, a practical performance-based evaluation would measure the ability to "compute the allowable occupant load of a single-use occupancy." The candidate passes this particular evaluation if the standard was met — that is, the occupant load that the inspector calculates accurately reflects the requirements of the code being used.

For Example 2, when evaluating the task "interpret burn patterns," the candidate could be given a written assessment in the form of a scenario, photographs, and drawings and then be asked to respond to specific written questions related to the JPRs evaluation parameters.

It is important to remember that when a candidate is being evaluated, he or she must be given the tools, equipment, or materials listed in the JPRs (e.g., Pitot tube, gauges, calculators, and measuring tools) before he or she can be properly evaluated.

C-4 Curriculum Development/Training Design and Evaluation. The statements contained in this document that refer to job performance were designed and written as JPRs. While a resemblance to instructional objectives might be present, these statements should not be used in a teaching situation until after they have been modified for instructional use.

JPRs state the behaviors required to perform specific skill(s) on the job as opposed to a learning situation. These statements should be converted into instructional objectives with behaviors, conditions, and standards that can be measured within the teaching/learning environment. A JPR that requires a fire fighter to "compute the allowable occupant load" should be converted into a measurable instructional objective for use when teaching the skill. *[See Figure C-4(a).]*

Using Example 1, a terminal instructional objective might read as follows.

The candidate will compute the allowable occupant load, given a detailed description of a single-use occupancy, so that 100 percent accuracy is attained on a skills checklist. (At a minimum, the skills checklist should include each of the measurement criteria from the JPR.)

Figure C-4(b) is a sample checklist for use in evaluating this objective.

While the differences between job performance requirements and instructional objectives are subtle in appearance, the purpose of each statement differs greatly. JPRs state what is necessary to perform the job in the "real world." Instructional objectives, however, are used to identify what students must do at the end of a training session and are stated in behavioral terms that are measurable in the training environment.

By converting JPRs into instructional objectives, instructors will be able to clarify performance expectations and avoid confusion related to using statements designed for purposes other than teaching. Additionally, instructors will be able to add local/state/regional elements of performance into the standards as intended by the developers.

Requisite skills and knowledge should be converted into enabling objectives. The enabling objectives help to define the course content. The course content should include each of the requisite knowledge and skills. Using Figure C-4(b), the enabling objectives are classification of occupancy types, the operational features of various occupancies, fire hazards presented by various occupancies, occupant load factors for various occupancies, and applicable codes related to occupant load. These enabling objectives ensure that the course content supports the terminal objective.

NOTE: It is assumed that the reader is familiar with curriculum development or training design and evaluation.

C-5 Other Uses. While the professional qualifications standards are principally used to guide the development of training and certification programs, there are a number of other potential uses for the documents. Because the documents are written using JPR terms, they lend themselves well to any area of the profession where a level of performance or expertise must be determined.

These areas might include the following.

Employee Evaluation/Performance Critiquing. The JPRs can be used as a guide by both the supervisor and the employee during an evaluation. The JPRs for a specific job define tasks that

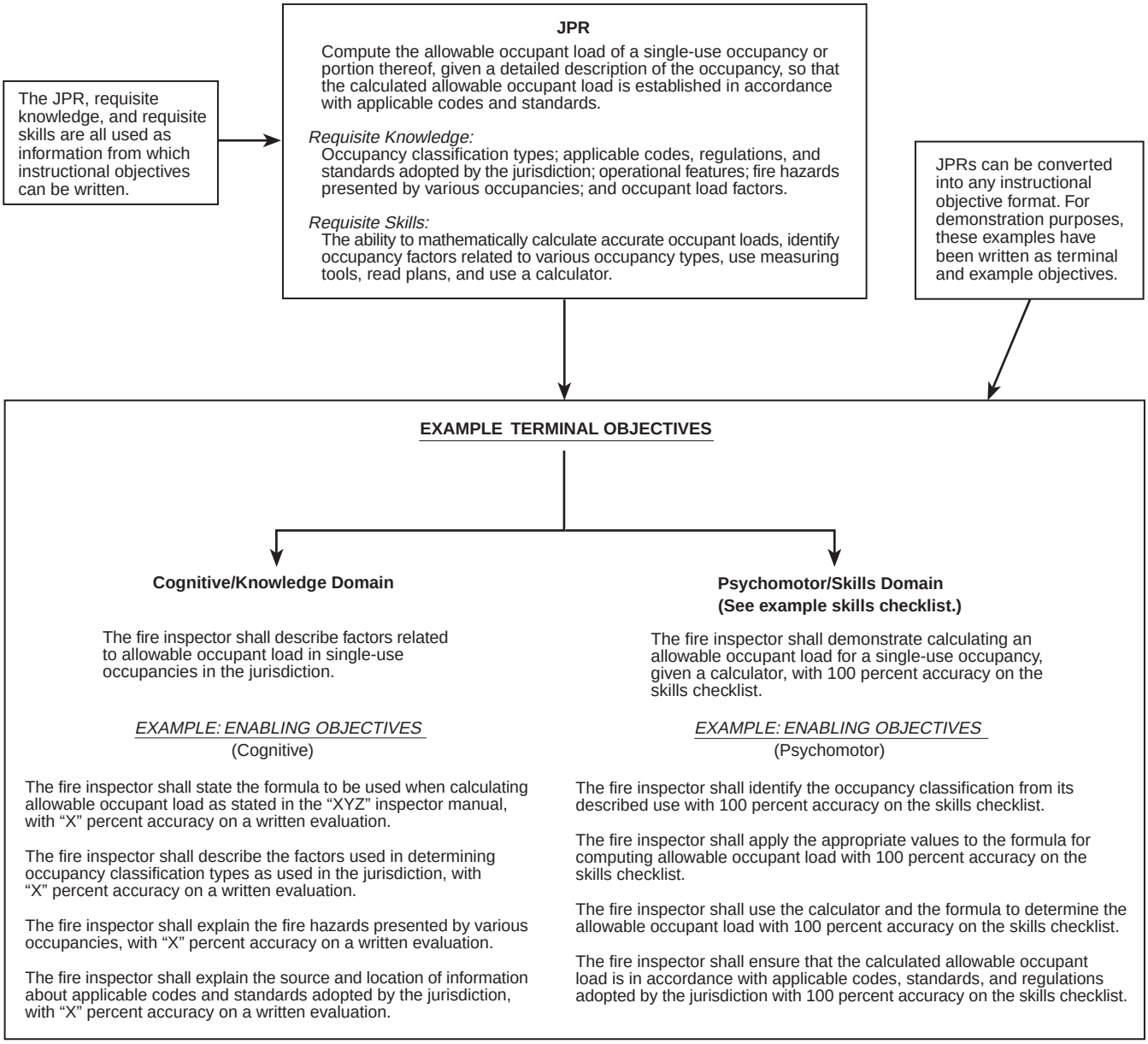

Figure C-4(a) Converting JPRs into instructional objectives.

are essential to perform on the job as well as the evaluation criteria to measure when those tasks are completed.

Establishing Hiring Criteria. The professional qualifications standards can be used in a number of ways to further the establishment of hiring criteria. The authority having jurisdiction could simply require certification at a specific job level (e.g., Fire Inspector I). The JPRs could also be used as the basis for pre-employment screening by establishing essential minimal tasks and the related evaluation criteria. An added benefit is that individuals interested in employment can work towards the minimal hiring criteria at local colleges.

Employee Development. The professional qualifications standards can be useful to both the employee and the employer in developing a plan for the individual's growth within the organization. The JPRs and the associated requisite knowledge and skills can be used as a guide to determine additional training

OBJECTIVE: The fire inspector shall compute the allowable load of a single-use occupancy or portion thereof, given a detailed description of the occupancy, with 100 percent accuracy on the skills checklist.

YES	NO	
☐	☐	1. The occupancy classification is identified.
☐	☐	2. The allowable occupant load is calculated.
☐	☐	3. The calculated allowable occupant load is accurate.
☐	☐	4. The calculated occupant load is in accordance with applicable codes and standards.

Figure C-4(b) Skills checklist.

and education required for the employee to master the job or profession.

Succession Planning. Succession planning or career pathing addresses the efficient placement of people into jobs in response to current needs and anticipated future needs. A career development path can be established for targeted individuals to prepare them for growth within the organization. The JPRs and requisite knowledge and skills can then be used to develop an educational path to aid in the individual's advancement within the organization or profession.

Establishing Organizational Policies, Procedures, and Goals. The JPRs can be incorporated into organizational policies, procedures, and goals where employee performance is addressed.

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Appendix D Sample Job Description

This appendix is not a part of the requirements of this NFPA document but is included for informational purposes only.

D-1 Job Title: Fire Inspector I.

D-1.1 Basic Function. The Fire Inspector I is responsible for inspecting public, commercial, and residential structures for compliance with applicable fire codes.

D-1.2 Principal Responsibilities. The Fire Inspector I is responsible for the following:

(a) Inspects public, commercial, and residential structures to ensure compliance with jurisdiction, state, and federal fire codes and ordinances for compliance with fire codes
(b) Conducts inspections of fire hazard complaints and underground storage tanks for compliance with jurisdiction, state, and federal regulations
(c) Identifies corrective actions that must be made in order to bring properties into compliance with applicable fire codes, laws, regulations, and standards
(d) Assists citizens and other agency personnel with code interpretations and information when requested, prepares written documents, and maintains files
(e) Issues citations for fire code violations
(f) Provides court testimony regarding fire code violations

D-1.3 Typical Decisions. The incumbent determines if structures are in compliance with jurisdiction, state, and federal fire codes and ordinances. The incumbent establishes performance measures for subordinates and evaluates employee performance against those standards or measures.

D-1.4 Minimum Qualifications. The Fire Inspector I should have the following minimum qualifications:

(a) *Knowledge:* Position requires conducting fire safety programs and a working knowledge of methods of fire prevention, fire protection systems, and building construction.
(b) *Skills:* Position requires effective verbal and written communication skills. Must be able to make mathematical calculations.
(c) *Education:* Associate's degree in fire science or equivalent.
(d) *Experience:* Four years of experience, including one year of lead responsibility in one or more of the following: fire inspection or fire prevention.

Any work-related experience resulting in acceptable proficiency levels in the minimum qualifications is an acceptable substitute for the specified education and experience requirements listed in (c) and (d).

(e) *Licenses/Certificates:* Drivers' license and inspector certification.

D-2 Job Title: Fire Inspector II.

D-2.1 Basic Function. The Fire Inspector II is responsible for inspecting public, commercial, and residential structures for compliance with applicable fire codes.

D-2.2 Principal Responsibilities. The Fire Inspector II is responsible for the following:

(a) Inspects and evaluates public, commercial, and residential structures to ensure compliance with jurisdiction, state, and federal fire codes and ordinances and reviews plans for compliance with fire codes
(b) Conducts inspections of complex fire hazard complaints and underground storage tanks for compliance with jurisdiction, state, and federal regulations
(c) Identifies corrective actions that must be made in order to bring properties into compliance with applicable fire codes, laws, regulations, and standards and recommends modifications to jurisdiction's fire codes
(d) Assists citizens and other agency personnel with code interpretations and information when requested, prepares written documentation, creates forms and check-

lists addressing key inspection issues, and designs and maintains filing system for division

(e) Issues citations for fire code violations and provides court testimony regarding fire code violations

(f) Assists and instructs lower level inspectors in code application, interpretation, and office procedures

D-2.3 Typical Decisions. The incumbent determines if structures are in compliance with jurisdiction, state, and federal fire codes and ordinances. The incumbent establishes performance measures for subordinates and evaluates employee performance against those standards or measures. Recommends modifications in the policies and procedures of the division.

D-2.4 Minimum Qualifications. The Fire Inspector II should have the following minimum qualifications:

(a) *Knowledge:* Position requires conducting fire safety programs and a working knowledge of methods of fire prevention, fire protection systems, and building construction.

(b) *Skills:* Position requires effective verbal and written communication skills. Must be able to make mathematical calculations.

(c) *Education:* Bachelor's degree in fire protection, fire science, or equivalent.

(d) *Experience:* Four years of experience, including one year of lead responsibility in one or more of the following: fire inspection or fire prevention.

Any work-related experience resulting in acceptable proficiency levels in the minimum qualifications is an acceptable substitute for the specified education and experience requirements listed in (c) and (d).

(e) *Licenses/Certificates:* Drivers' license and inspector certification.

D-3 Job Title: Fire Inspector III.

D-3.1 Basic Function. The Fire Inspector III is responsible for the fire prevention and fire inspection activities of the jurisdiction. The Fire Inspector III serves as a manager and directs all activities of the division and integrates the jurisdiction's goals into the day-to-day operation of the division.

D-3.2 Principal Responsibilities. The Fire Inspector III is responsible for the following:

(a) Directs the preparation and submittal of the division's budget and allocates its resources in accordance with policy to ensure maximum performance

(b) Serves as the division's liaison with various jurisdiction, state, and federal government agencies, as well as local organizations and groups

(c) Recommends and implements changes in division policy and operations to improve efficiency and effectiveness, and prepares and recommends updates in codes and standards for the jurisdiction

(d) Directly supervises all employees assigned to the division

(e) Indirectly coordinates through an established chain of command all fire department services, programs, and activities relating to fire prevention

(f) Establishes realistic and obtainable goals for subordinates through a team process and ensures successful obtainment of these goals through appropriate training and assigned accountability

(g) Serves as a highly visible representative of the fire department and the fire service to the jurisdiction at large through involvement in various community organizations and events relating to fire prevention

D-3.3 Typical Decisions. The incumbent is required to make decisions relating to employee selection and appointment, fire code development and interpretations, and divisional administrative matters.

D-3.4 Minimum Qualifications. The Fire Inspector III should have the following minimum qualifications:

(a) *Knowledge:* Requires thorough knowledge of the principles, practices, and techniques of modern suppression systems and fire prevention practices and must also possess the ability to apply this knowledge to fire prevention laws and ordinances; principles of public administration with reference to code development, enforcement, and personnel administration; and principles of jurisdiction budget preparation and finance.

(b) *Skills:* Must have the ability to provide effective leadership and to plan and assign, directing the work of subordinates; plan, initiate, and carry out long-term programs in the division and relate the division's programs with other jurisdictional programs, goals, and objectives; speak and deal tactfully and effectively with the people with whom he or she comes in contact; fairly and effectively evaluate the performance of subordinates; communicate verbally and in writing to analyze the concepts necessary for accomplishment of required written and verbal records and reports; and exhibit an ability to positively represent the department and jurisdiction in the community at large.

(c) *Education:* Minimum of a bachelor's degree (master's degree preferred) with concentration in fire science, public administration, or related fields, supplemented by specialized training sufficient to meet the qualifications for certification as a master fire inspector.

(d) *Experience:* Ten years experience as a full-time employee with a career department with a strong background in fire prevention and code enforcement. Must also have demonstrated technical competence in the areas of fire suppression system design and development and code administration.

Any work-related experience resulting in acceptable proficiency levels in the minimum qualifications is an acceptable substitute for the specified education and experience requirements listed in (c) and (d).

(e) *Licenses/Certificates:* Drivers' license and master inspector certification.

NOTE: The statements in (a) through (e) are intended to describe the general nature and level of work being performed and are not intended to be an exhaustive list of all responsibilities, duties, and skills that can be required.

D-4 Job Title: Plan Reviewer I.

D-4.1 Basic Function. The Plan Reviewer I is responsible for examining building plans, fire protection system plans, and specifications for compliance with applicable fire codes and laws.

D-4.2 Principal Responsibilities. The Plan Reviewer I is responsible for the following:

(a) Responds to fire code, law, and life safety inquiries from citizens

(b) Reviews and evaluates routine building plans, site plans, and fire protection system plans in terms of fire code and building code life safety criteria

(c) Receives and responds to requests for information and technical assistance from architects, engineers, and developers on design criteria for various occupancies and industrial processes

(d) Attends meetings with architects, developers, and jurisdiction staff to discuss plan review requirements and procedures

(e) Assists in preparation of variances and appeals before the Building Standards Commission

D-4.3 Typical Decisions. The incumbent evaluates and approves fire protection system plan submittals and makes recommendations on alternate methods or materials when appropriate. The incumbent evaluates and makes recommendations on requests for variance to the fire codes and local laws pertaining to fire safety.

D-4.4 Minimum Qualifications. The Plan Reviewer I should have the following minimum qualifications:

(a) *Knowledge:* Requires a working knowledge of fire and building codes and laws. Requires basic knowledge of the principles, techniques, and design of fixed fire suppression and detection systems. Requires the ability to read and interpret plans and blueprints.

(b) *Skills:* Position requires effective verbal and written communication skills.

(c) *Education:* Associate's degree (bachelor's degree preferred) in fire protection technology or related field.

(d) *Experience:* One year experience in fire protection.

Any work-related experience resulting in acceptable proficiency levels in the minimum qualifications is an acceptable substitute for the specified education and experience requirements listed in (c) and (d).

(e) *Licenses/Certificates:* Drivers' license, certified inspector within 12 months, and certification in fire alarms and automatic sprinklers within 18 months of hire date.

D-5 Job Title: Plan Reviewer II.

D-5.1 Basic Function. The Plan Reviewer II is responsible for examining building plans, fire protection system plans, and specifications for compliance with applicable fire codes and laws.

D-5.2 Principal Responsibilities. The Plan Reviewer II is responsible for the following:

(a) Responds to fire code, law, and life safety inquiries from citizens

(b) Reviews and evaluates routine and detailed building plans, site plans, and fire protection system plans in terms of fire code and building code life safety criteria

(c) Receives and responds to requests for information and technical assistance from architects, engineers, and developers on design criteria for various occupancies and industrial processes

(d) Attends meetings with architects, developers, and jurisdiction staff to discuss plan review requirements and procedures

(e) Assists in preparation of variances and appeals before the Building Standards Commission and prepares and authenticates the division's documents

(f) Assists and instructs lower level plan reviewers in code application, interpretation, and office procedures

D-5.3 Typical Decisions. The incumbent evaluates and approves fire protection system plan submittals and makes recommendations on alternate methods or materials when appropriate. The incumbent evaluates and makes recommendations on requests for variance to the fire codes and local laws pertaining to fire safety.

D-5.4 Minimum Qualifications. The Plan Reviewer II should have the following minimum qualifications:

(a) *Knowledge:* Requires a working knowledge of fire and building codes and laws. Requires basic knowledge of the principles, techniques, and design of fixed fire suppression and detection systems. Requires the ability to read and interpret plans and blueprints. Establishes performance measures for subordinates and evaluates employee performance against those standards or measures.

(b) *Skills:* Position requires effective verbal and written communication skills.

(c) *Education:* Associate's degree (bachelor's degree preferred) in fire protection technology or related field.

(d) *Experience:* One year experience in fire protection.

Any work-related experience resulting in acceptable proficiency levels in the minimum qualifications is an acceptable substitute for the specified education and experience requirements listed in (c) and (d).

(e) *Licenses/Certificates:* Drivers' license, certified inspector within 12 months, and certification in fire alarms and automatic sprinklers within 18 months of hire date.

NOTE: The statements in (a) through (e) are intended to describe the general nature and level of work being performed and are not intended to be an exhaustive list of all responsibilities, duties, and skills that can be required.

Appendix E An Overview of JPRs for Fire Inspector and Plan Reviewer

This appendix is not part of the requirements of this NFPA document but is included for informational purposes only.

The matrices shown in Tables E-1 and E-2 are included to provide the user of the standard with an overview of the JPRs and the progression of the various levels found in the document. They are intended to assist the user of the document with the implementation of the requirements and the development of training programs using the JPRs.

Table E-1 Overview of JPRs for Fire Inspector

JPR	Fire Inspector I	Fire Inspector II	Fire Inspector III
		Administration	
Written correspondence	**3-2.1** Prepare written correspondence to communicate fire protection and prevention practices, given a common fire safety issue, so that the correspondence is concise, accurately reflects applicable codes and standards, and is appropriate for the intended audience.	**4-2.1** Develop written correspondence to communicate fire protection and prevention requirements, given a complex fire safety issue, so that the correspondence reflects research and accurate interpretation of applicable codes and standards and is appropriate for the intended audience.	**5-2.1** Generate written correspondence related to the issuance of appeals and variances, given a request for a variance or an appeal, so that the resulting document clearly addresses the issue and is appropriate for the intended audience.
Reports, forms, checklists	**3-2.2** Prepare inspection reports, given observations from a field inspection, so that the report is clear and concise and accurately reflects the findings of the inspection in accordance with applicable codes and standards.	**4-2.2** Create inspection checklists and forms, given applicable codes, standards, policies, and procedures of the jurisdiction, so that the materials developed are clear and concise and key issues are addressed.	**5-2.10** Evaluate the completion and correctness of inspection reports and completed forms and checklists, given applicable codes, standards, policies, and procedures of the jurisdiction, so that the information contained in the report forms and checklists is correct, clear, and concise and key issues are addressed in compliance with applicable codes, standards, and policies.
Permits and plan review	**3-2.3** Recognize the need for a permit, given a situation or condition, so that requirements for permits are communicated in accordance with the policies of the jurisdiction. **3-2.4** Recognize the need for plan review, given a situation or condition, so that requirements for plan reviews are communicated in accordance with the policies of the jurisdiction.	**4-2.3** Process a permit application, given a specific request, so that the application is evaluated and a permit is issued or denied in accordance with the applicable codes, standards, policies, and procedures of the jurisdiction. **4-2.4** Process a plan review application, given a specific request, so that the application is evaluated and processed in accordance with the applicable policies and procedures of the jurisdiction.	**5-2.6** Enforce permit regulations, given a report of a violation, so that revocation decisions are in accordance with the policies of the jurisdiction and applicable codes and standards. **5-2.7** Enforce plan review regulations, given a report of a violation, so that corrective action is taken in accordance with the policies of the jurisdiction and applicable codes and standards.
Complaints	**3-2.5** Investigate common complaints, given a reported situation or condition, so that complaint information is recorded, the appropriate process is initiated, and the complaint is resolved.	**4-2.6** Investigate complex complaints, given a reported situation or condition, so that complaint information is recorded, the appropriate process is initiated, and the complaint is resolved.	
File maintenance	**3-2.6** Maintain files, given inspection reports, complaint investigations, and related documents, so that information can be easily retrieved and is filed in compliance with the record-keeping policies of the organization.		**5-2.11** Design a filing system, given inspection requirements and needs, fire code complaints, and related documents, so that information can be efficiently maintained and retrieved and is maintained in accordance with the record-keeping process of the jurisdiction and state and federal requirements.

Table E-1 Overview of JPRs for Fire Inspector, *Continued*

JPR	Fire Inspector I	Fire Inspector II	Fire Inspector III
Codes and standards	**3-2.7** Identify the applicable code or standard, given a fire protection, fire prevention, or life safety issue, so that the proper document, edition, and section are referenced.	**4-2.7** Recommend modifications to codes and standards of the jurisdiction, given a fire safety issue, so that the proposed codes and standards are properly written and address the problem, need, or deficiency.	**5-2.2** Facilitate code adoption and modification processes, given fire loss data and a demonstrated need or deficiency, so that the code is properly written and precisely addresses the identified need or deficiency. **5-2.3** Assess the impact of proposed codes, ordinances, and other legislation, given draft documents, so that the impact of the proposal on fire safety and code enforcement activities is documented. **5-2.5** Suggest technical reference material acquisition, given a scope of responsibility, budget limitations, and specific code-related issues, so that resources matching specific needs are acquired within budget limitations.
Legal	**3-2.8** Testify at legal proceedings, given the findings of a field inspection or a complaint and consultation with legal counsel, so that all information is presented accurately and the inspector's demeanor is appropriate for the proceeding.	**4-2.5** Testify at legal proceedings, given the findings of a plan review and consultation with legal counsel, so that all information is presented accurately and the inspector's demeanor is appropriate to the proceeding.	**5-2.8** Initiate legal action related to a fire code violation, given a description of a violation and a legal opinion, so that the action taken is in accordance with the policies of the jurisdiction and due process of law is followed.
Policies and procedures		**4-2.8** Recommend policies and procedures for the delivery of inspection services, given management objectives, so that inspections are carried out in accordance with the policies of the jurisdiction and due process of the law is followed.	**5-2.4** Develop policies and procedures for the administration of inspection functions, given management objectives, so that the policies are clearly defined and concise and in accordance with the legal obligations of the jurisdiction.
Budget			**5-2.9** Recommend a program budget, given organizational goals, budget guidelines, and organizational needs, so that overall program needs are addressed within budget guidelines.
Field Inspection			
Occupancy classification	**3-3.1** Identify the occupancy classification of a single-use occupancy, given a description of the occupancy and its use, so that an accurate classification is made according to the applicable codes and standards.	**4-3.2** Identify the occupancy classification of a mixed-use building, given a description of the uses, so that each area is properly classified in accordance with applicable codes and standards.	
Occupant load	**3-3.2** Compute the allowable occupant load of a single-use occupancy or portion thereof, given a detailed description of the occupancy, so that the calculated allowable occupant load is established in accordance with applicable codes and standards.	**4-3.1** Compute the occupant load of a multiuse building, given field observations or a description of its uses, so that the maximum occupant load calculation is accurate and in accordance with applicable codes and standards.	**5-3.1** Assess alternative methods to adjust occupant loads, given a description of an area, building, or portion of a building and its intended use, so that the permitted occupant load is in accordance with applicable codes and standards.

(continues)

Table E-1 Overview of JPRs for Fire Inspector, ***Continued***

JPR	Fire Inspector I	Fire Inspector II	Fire Inspector III
Means of egress	**3-3.3** Inspect means of egress elements, given observations made during a field inspection of an existing building, so that means of egress elements are maintained in compliance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.	**4-3.5** Analyze the egress elements of a building or portion of a building, given observations made during a field inspection, so that means of egress elements are provided and located in accordance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.	**5-3.2** Evaluate corrective measures, given a list of means of egress deficiencies in a building and the proposed correction, so that each deficiency and its proposed correction are evaluated for compliance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
Construction types	**3-3.4** Verify the type of construction for an addition or remodeling project, given field observations or a description of the project and the materials being used, so that the construction type is classified and recorded in accordance with the applicable codes and standards and the policies of the jurisdiction.	**4-3.3** Determine the type of construction in a new building, given plan review and observations or a description of the building's height, area, occupancy, and construction features, so that the construction type is properly classified according to applicable codes and standards.	**5-3.3** Evaluate the construction type required for an addition or remodeling project, given a description of the building and its use, so that the construction type is evaluated based on applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
Fire protection systems	**3-3.5** Determine the operational readiness of existing fixed fire suppression systems, given test documentation and field observations, so that the system(s) is in an operational state, maintenance is documented, and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction. **3-3.6** Determine the operational readiness of existing fire detection and alarm systems, given test documentation and field observations, so that the systems are in an operational state, maintenance is documented, and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction. **3-3.7** Determine the operational readiness of existing portable fire extinguishers, given field observations and test documentation, so that the equipment is in an operational state, maintenance is documented, and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.	**4-3.4** Evaluate fire protection systems and equipment provided for the protection of a building or facility, given field observations of the facility and documentation, the hazards protected, and the system specifications, so that the fire protection systems provided are appropriate for the occupancy or hazard being protected and are installed in compliance with applicable codes and standards and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.	**5-3.10** Witness an acceptance test for an integrated fire protection system, given an installed system, so that the test is conducted in accordance with applicable codes and standards and the system performance can be evaluated for compliance and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.