



FIRE INSPECTOR II

Candidate Handbook

This Fire Inspector II Candidate Handbook contains important program information, please carefully review this handbook and retain it for reference.



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NFPA's MISSION

Our vision: We are the leading global advocate for the elimination of death, injury, property and economic loss due to fire, electrical and related hazards.

Our mission: To help save lives and reduce loss with information, knowledge and passion.

MISSION OF NFPA CERTIFICATION PROGRAMS

The overall mission of NFPA's Certification Program is to enhance human and organizational performance as related to the use and application of NFPA codes and standards.

FIRE INSPECTOR II CERTIFICATION PROGRAM

The NFPA Fire Inspector II certification program was created in response to repeated requests by local entities, state agencies, and national organizations for certification programs founded on the *NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner*, and other applicable NFPA codes and standards. These requests suggested that NFPA be the main catalyst and ultimate certifying body for such programs.

In late 1996, an independent organization conducted research that validated this need, and in 1998 the current fire inspector I certification program became operational. Soon after, NFPA developed the certified fire inspector II and the certified fire plan examiner programs. NFPA received its Pro Board accreditation in 2015.

PRO BOARD ACCREDITATION

NFPA received its Pro Board accreditation on April 1, 2015. CFI-I, CFI-II, and CFPE certifications are now recognized by the Pro Board. Those candidates taking the NFPA exam after April 1, 2015, will be entered into the Pro Board registry and receive a certificate with both the NFPA and Pro Board seals.

CFI-II PROGRAM GOALS:

- Enhance professionalism within the fire inspection community
- Ensure a uniform, fair process for certification that is accessible to everyone who is eligible
- Ensure proficiency in the use of codes and standards
- Facilitate success for those seeking certification
- Promote professional development through continuous learning
- Recognize and provide evidence of competence as related to *NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner*

FEATURES & BENEFITS

CFI-II credential holders receive the following benefits:

- A Pro Board recognized certification
- Recognition as an expert by your colleagues
- Greater confidence in your abilities

- Improved job performance
- Career advancement opportunities

Certificate holders also receive an NFPA / Pro Board CFI-II certificate that further highlights their accomplishment.

ELIGIBILITY

A candidate for the CFI-II certification must have a high school diploma or the equivalent and have an active fire inspector I certification, before being allowed to sit for the exam.

APPLICATIONS & FORMS

All CFI-II applications including the program application, and retest application can be found online at nfpa.org/cfi2.

APPLICATION ACCEPTANCE

An application is accepted only when both the completed and signed application is received by NFPA, and when the examination fee has been processed.

Important: When emailing this application to NFPA, you must use the NFPA secure email server at web1.zixmail.net/s/welcome.jsp?b=nfpa. Once you access this server and create your NFPA secure email account, you should select OTHER from the "To" pull-down list, and then enter adminsvecs@nfpa.org in the address box. Complete the email process by attaching your personal documentation and clicking "Send."

Following the receipt of your CFI-II application form and exam fee, the NFPA will send you an authorization letter with instructions on how to schedule your computer based exam.

PROGRAM FEES

\$350 USD for the initial exam. \$150 USD to recertify at the end of each three (3) year certification period. The most up to date fee schedule may be found on the applicable forms at nfpa.org/cfi2.

VETERANS AFFAIRS BENEFITS

The U.S. Department of Veterans Affairs (VA) has approved the CFI-II certification program for reimbursement of exam fees. Contact your local veterans' affairs office for details.

NON-DISCRIMINATION

NFPA evaluates all CFI-II candidates without regard to race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, or family/parental status.

SPECIAL ACCOMMODATIONS

NFPA provides special accommodations in accordance with the Americans with Disabilities Act of 1991 (ADA). If a disability prevents you from taking the exam under

standard conditions, you may request special accommodations. Written requests explaining the nature of the disability (i.e., the diagnosis), the type of accommodation you feel is appropriate, and supporting documentation of the diagnosis from a qualified healthcare professional must accompany the registration application. NFPA reserves the right to request reasonable documentation from healthcare or other professionals to support requests for special accommodations.

STEPS TO CERTIFICATION

- **Step 1 – Application** – Submit your application online at <https://www.nfpa.org/-/media/Files/Training/certification/CFI-II/CFIApplication.ashx>, using a credit card or mail your application with a check to the address on the application form.
- **Step 2 - Exam** - You will have to sit for the exam within four months of entering the CFI-I program. If you fail your exam, you are permitted to retest two (2) additional times (*completing a retest application and paying a retest fee each time*) within twelve (12) months from the day your original CFI-II application was accepted. If you fail the exam three (3) times within this period, you must wait until the twelve (12) month testing period expires before you will be allowed to restart the registration process.
- **Step 4 - Practicum** - Complete the required CFI-II practicum and submit the required practicum verification forms to NFPA within twelve (12) months from the day your original CFI-II application was accepted. For those candidates working with a partnering agency, please submit practicum verification forms to your program administrator.

REFERENCE MATERIALS

It is the candidate's responsibility to obtain materials needed for study purposes and to have present during the exam. The following list contains resources that may be used in preparing for and taking the exam. All exam questions are compatible with these code sets. Please verify which set you require, with your jurisdiction or certification partnership agency.

2015 NFPA Code Set:

- NFPA 1, Fire Code - 2015 Ed.
- NFPA 13, Installation of Sprinkler Systems - 2013 Ed.
- NFPA 25, Standard for the ITM of Water-Based Fire Protection Systems - 2014 Ed.
- NFPA 72, National Fire Alarm Code® - 2013 Ed.
- NFPA 101®, Life Safety Code® - 2015 Ed.

2018 NFPA Code Set:

- NFPA 1, Fire Code - 2018 Ed.
- NFPA 13, Installation of Sprinkler Systems - 2016 Ed.
- NFPA 25, Standard for the ITM of Water-Based Fire Protection Systems - 2017 Ed.
- NFPA 72, National Fire Alarm Code® - 2016 Ed.
- NFPA 101®, Life Safety Code® - 2018 Ed.

These NFPA codes and standards have been conveniently packaged into reference sets and are available for people registering for the CFI-II exam at a discounted price, only

through NFPA Admin. & Support Services. Refer to the CFI-II application form to order these references.

IFSTA Fire Inspection and Code Enforcement Manual, 8th Edition.

A portion of the exam questions are based on content found in the *IFSTA Fire Inspection and Code Enforcement Manual, 8th Edition*. This publication may be purchased on the International Fire Service Training Association's website at ifsta.org.

EXAM PREPARATION

The NFPA CFI-II exam is based on the job performance requirements for the fire inspector I level that are defined in chapter 5 of the 2014 Edition of *NFPA 1031, Standard for Professional Qualification for Fire Inspector and Plans Examiner*. (See NFPA 1031 requirements section.)

Review Reference Materials - It is not necessary to memorize the reference materials, but it is important to know what content is found in each of the referenced NFPA documents. For example, *NFPA 1, Fire Code*, covers all aspects of fire protection and prevention utilized in other NFPA codes and standards. Know the general format of the NFPA documents. Each NFPA document is laid out in the same way and divided into similar sections, beginning with administration and definitions, followed by the specific requirements in the code. Also, look for tables in the documents that summarize requirements. These tips will help you find specific information quickly during the exam.

Sample Code Research Problem - (See Research Problem section) this sample problem is designed to guide the candidate through solving a problem by researching a code. The ability to look at a question or problem related to a code issue, identify the relevant code or standard, and then locate the correct answer is one of the most essential skills a fire inspector must develop.

Try the activity on your own, and then look at the solution that is provided to see if you are on track. Follow the path through the codes until you can see how the problem was addressed and answered. During the examination, understanding this process will help you to identify the issue, and use code documents to answer the questions.

Additional Materials - In addition to the seven NFPA resources listed above, the *NFPA Fire and Life Safety Inspection Manual, 9th Edition*, and the *NFPA Fire Protection Handbook, 20th Edition* are excellent resources for study and review.

Sample Questions – The Exam Study Guide contains a number of sample questions to help you become familiar with similar types of questions found on the exam. The answers to the sample questions can be found on the last page of the section.

Sample Question - What is the occupant load factor used for determining the required means of egress for an existing business occupancy?

- (A) 20 sq ft (1.9 sq m)
- (B) 50 sq ft (4.6 sq m)
- (C) 100 sq ft (9.3 sq m)
- (D) 200 sq ft (18.6 sq m)

Analyze the Question - This is an occupancy question that deals with means of egress. Find the right reference document – Means of egress provisions and other occupancy questions are addressed by *NFPA 101®*, *Life Safety Code®*.

Find the right reference – Chapter 7 deals with means of egress, and Table 7.3.1.2 lists occupant load factors

EXAM FORMAT

The exam is designed to evaluate the candidate's knowledge of fire inspection principles and code application skills at the level of fire inspector II (as defined in *NFPA 1031*). The exam is a four hour, 100 multiple-choice question, open-book exam. It is compatible with the 2015 and 2018 reference sets listed above. The exam is only available in English.

- **Computer Based Exam** - is available on demand at test centers throughout the world. Upon receipt of the application and test fee, the applicant will receive their authorization letter with instructions on how to schedule their computer-based exam.

EXAM RULES AND PROCEDURES

The following policies and procedures pertain to every candidate taking the exam. Failure to comply will be grounds for dismissal from the exam location:

- You must present a valid photo ID.
- Smart phones and other electronic devices are not permitted in the testing area.
- Personal calculators are NOT permitted at the test center. A scientific calculator is available on-screen.
- You will not be permitted to continue the test beyond the four-hour time limit.
- You should bring only the approved, published and copyrighted documents identified in this handbook into the exam room. Photocopies of documents, additional pages with notations, and other test taking aids are not permitted. All materials taken into the exam room are subject to review by the proctor.
- Electronic versions of NFPA documents are not permitted to be used at the test site.
- You may highlight, tab, and make notations within your NFPA documents prior to entering the exam room. Only commercial permanent adhesive type tabs are allowed. Post-it type notes or other types of easily moveable tabs are **not** permitted. You may **not** write on, mark in, or tab the pages of your NFPA documents during the exam.
- If you wish to leave the room during the test, you must secure the proctor's permission. You will not be allowed to make up lost time.
- Visitors are not permitted at the testing location.
- Smoking is not permitted in the testing area.

- NFPA certification staff. Candidates will not receive responses to their comments. For computer-based exams, comments may be entered on the screen. For paper and pencil exams, comments may be submitted on a form available from the proctor.

EXAM RESCHEDULING/CANCELATION

If you wish to change your exam date or time, you may do so through the Prometric scheduling portal at <https://proscheduler.prometric.com/?prg=NFPA2&path=confirm> or by contacting Prometric's contact centers listed on <https://www.prometric.com/nfpacert>.

There is no charge for reschedule or cancellation of an appointment if the change is made 30 or more days prior to your appointment date.

Between 29 and 5 calendar days prior to your appointment date, you may cancel or reschedule your appointment, but you will be required to pay a \$50 fee (to Prometric). 4 or fewer days prior to your appointment date, you may not reschedule. If you cancel your appointment during this period or fail to appear for your appointment, you will be considered a no-show, and will need to submit a retest application with NFPA and pay applicable fees prior to scheduling a new appointment. Information on how to submit retest application can be found on the applicable certification program website at <https://www.nfpa.org/certification>.

EXAM SECURITY

Failure to follow candidate instructions regarding exam security will result in your application being voided and forfeiture of your application fee. Conduct that results in violation of exam security or disrupts the administration of the exam could result in cancellation of your exam and dismissal from the testing center. In addition, your exam will be considered void and will not be scored.

Examples of misconduct include, but are not limited to, the following: writing on anything other than the margins of your test booklet, looking at another candidate's exam, or talking with other candidates anytime during the entire exam period. You are particularly cautioned not to do so after you have completed the exam, as other candidates in the area might be taking a break and still have not completed the exam. You may not attend the exam only to review or audit test materials. You may not copy any portion of the exam for any reason. No exam information may leave the test room under any circumstances. This includes memorizing questions for distribution to any other person. No unauthorized persons will be admitted into the testing area.

It is very important for you to note all exam content is strictly confidential. You may only communicate about the test, or questions on the test, using the appropriate forms provided within the exam delivery system. At no other time, before, during or after the exam, may you communicate orally, electronically or in writing with any person or entity about the content of the exam or individual exam questions.

The NFPA shall have the right to revoke or invalidate any exam score with or without a finding of fault or misconduct if data forensic analysis or other credible evidence establishes a reasonable possibility that a score is not valid or the integrity or security of the exam was compromised.

COPYRIGHT

CFI-II exam questions are copyrighted by the NFPA. All rights reserved. Reproduction, distribution or display in any form or by any means, electronic, mechanical or otherwise, is strictly prohibited.

EXAM RESULTS

The computer-based examination allows candidates to receive their results immediately upon completion. The exam results are reported as pass or fail. Your actual exam score or percentage will not be provided. You will also receive an email with a diagnostic report that provides an infographic indicating how you performed on each content area so that you may see which topics you will need to study to prepare for a retest.

RETEST

If you fail your exam, you are permitted to retest two additional times (completing a retest application and paying a retest fee each time) within 12 months from the day your original CFI-II application was accepted. If you fail the exam three times within this period, you must wait until the 12-month testing period expires before you will be allowed to restart the registration process. The retest application is online at nfpa.org/cfi2. The cost to retest is \$175 USD.

CONFIDENTIALITY

The identity and information concerning all candidates is confidential. Information regarding exam results are only communicated in writing from NFPA Admin. & Support Services directly to the candidate. Exam results are never provided over the phone.

PRACTICUM PHASE EXPLANATION

The objective of the practicum phase is to provide the CFI-II candidate with an opportunity to demonstrate the application of the skills and knowledge that are used on the job through actual field inspections, and to satisfy any NFPA 1031 job performance requirement's that may not have appeared on the exam. Successful completion of the practicum is a requirement for certification. The evaluation parameters are based on the requirements of chapter 5 in *NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner*.

The practicum consists of 14 activities including five related to administration, seven to field inspections, and two to plan review. A signed verification form is required for each activity. For detailed information refer to the CFI-II Practicum Phase Workbook.

Inspection Notes:

Candidates from jurisdictions without suitable properties should arrange to complete the required inspections in a jurisdiction with available locations. At least one of the properties

included in the submittal package should be a building that is under construction or major renovation.

USE OF YOUR CFI-II CREDENTIAL

Once granted the CFI-II credential, the certified may refer to themselves as a CFI-II credential holder as long as the certified has an active certification status. The certified is authorized to use the CFI-II designation after their name on business cards, personal letterhead, resumes, websites and in their email signature.

RECERTIFICATION

Once a candidate has been certified as a fire inspector II, recertification every three years is required. If NFPA does not receive the necessary recertification materials within the three year period, the certification holder will no longer be considered a certified fire inspector, and will no longer be entitled to use the CFI-II credential in professional communications. To regain certification, the candidate must successfully complete the entire CFI-II certification program (subject to the applicable application fees).

In order to maintain currency and relevancy in the profession, CFI-II certification holders are required to demonstrate their continuing participation in professional development activities in the fire inspection field of practice.

NFPA awards points towards recertification for various activities. Sixty (60) points of professional development activities related to fire inspection must be earned and submitted during the 3-year recertification cycle. Certification holders are required to complete and return the Summary of Recertification Points Form attesting that they have 60 recertification points. Recertification forms are available at nfpa.org/cfi2. Back up documentation is not required when submitting the Summary of Recertification Points Form.

RECERTIFICATION AUDIT

Certification holders may be subject to a random audit of their CFI-II recertification documentation for a period of up to six (6) months after their recertification date. Accordingly, certification holders are expected to retain recertification documentation in their possession for six (6) months beyond their recertification date.

In order to recertify, the certificant must accumulate continuing education points. It is important that you begin accumulating the required points as soon as possible. All activities must be clearly related to the fire inspector field of practice. If college courses are declared for training hours, the same course cannot be taken twice within the 3-year period, and the candidate must convert credit hours to actual hours spent in the classroom.

The certified must submit documented evidence of a total of 60 credit points from the following categories:

<u>Category</u>	<u>Allotment</u>	<u>Minimum Points</u>	<u>Maximum Points</u>
Training	One point per contact hour	Fifteen (15)	Sixty (60)
Teaching	Two points per contact hour	Zero (0)	Forty-five (45)
Professional Practice	½ point per hour of inspection	Zero (0)	Thirty (30)
Writing for Publication	Five points per article	Zero (0)	Fifteen (15)
Writing for Publication	Ten points per book	Zero (0)	Fifteen (15)

Documentation – Reasonable proof of attendance or participation in the described categories will be accepted. Reasonable includes:

- Course certificates (in person or online)
- Letters of attestation from course sponsors
- College transcripts
- Letters from employers
- Other evidence as required

REPLACEMENT CERTIFICATES

Replacement certificates are available at a charge of \$15.00 per certificate by contacting NFPA Admin. & Support Services at adminsvcs@nfpa.org.

CONTACT INFORMATION

NFPA Admin. & Support Services
 11 Tracy Drive
 Avon, MA 02322

Email: adminsvcs@nfpa.org

NFPA CFI-II EXAM WEIGHTED CRITERIA TABLE

The following table indicates the percentage (%) of exam content for the four major domains of the NFPA CFI-II exam. The domains and their sub-components are from the 2014 Edition of *NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner*. This exam weighted criteria is in effect as of March 1, 2019.

I. Administrative 10%

- A.** 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. (5.2.1)
 - i.** Requisite Knowledge. Permit application process and applicable codes, standards, policies, and procedures of the jurisdiction
 - ii.** Requisite Skills. The application of the requisite knowledge
- B.** Process a plan review application, given a specific request, so that the application is evaluated and processed in accordance with the applicable codes and standards and the policies of the jurisdiction. (5.2.2)
 - i.** Requisite Knowledge. Plan review application process, code requirements of the jurisdiction, and policies and procedures of the jurisdiction
 - ii.** Requisite Skills. The ability to communicate orally and in writing on matters related to code requirements, policies and procedures of the jurisdiction

II. General Knowledge 20%

- A.** Investigate complex complaints, given a reported situation or condition, so that complaint information is recorded, the investigation process is initiated, and the complaint is resolved in accordance with the applicable codes and standards and the policies of the jurisdiction. (5.2.3)
 - i.** Requisite Knowledge. Applicable codes and standards adopted by the jurisdiction and policies of the jurisdiction
 - ii.** Requisite Skills. The ability to interpret codes and standards, recognize problems, and refer complaints to other agencies when required
- B.** Recommend modifications to the adopted codes and standards of the jurisdiction, given a fire safety issue, so that the proposed modifications address the problem, need, or deficiency. (5.2.4)
 - i.** 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
 - ii.** Requisite Skills. The ability to recognize problems, collect and develop potential solutions, and identify cost/risk benefits
- C.** Recommend policies and procedures for the delivery of inspection services, given management objectives, so that inspections are conducted in accordance with the policies of the jurisdiction, and due process of the law is followed. (5.2.5)

- i. Requisite Knowledge. Policies and procedures of the jurisdiction related to code enforcement as well as sources of detailed and technical information relating to fire protection and life safety
- ii. Requisite Skills. The ability to identify approved construction methods and materials related to fire safety, read and interpret construction plans and specifications, educate, conduct research, make decisions, recognize problems, and resolve conflicts

III. Field Inspection 40%

- A. Compute the maximum allowable occupant load of a multi-use building, given field observations or a description of its uses, so that the maximum allowable occupant load calculation is in accordance with the applicable codes and standards. (5.3.1)
 - i. 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
 - ii. Requisite Skills. The ability to calculate occupant loads, identify occupancy factors related to various occupancy classifications, use measuring tools, read plans, and use a calculator
- B. Identify the occupancy classification of a mixed-use building, given a description of the uses, so that each area is classified in accordance with the applicable codes and standards. (5.3.2)
 - i. Requisite Knowledge. Occupancy classification, applicable codes and standards, operational features, and fire hazards presented by various occupancies
 - ii. Requisite Skills. The ability to interpret code requirements and recognize building uses that fall into each occupancy classification
- C. Evaluate fire protection systems and equipment provided for life safety and property protection, given field observations of the facility and documentation, the hazards protected, and the system specifications, so that the fire protection systems provided are approved for the occupancy or hazard being protected. (5.3.4)
 - i. Requisite Knowledge. Applicable codes and standards for fire protection systems, basic physical science as it relates to fire behavior and fire suppression, implications and hazards associated with system operation, installation techniques and acceptance inspection, testing and reports of maintenance of completed installations, and use and function of various systems
 - ii. Requisite Skills. The ability to recognize problems, use codes and standards, and read reports, plans, and specifications
- D. 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 deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction (5.3.5)
- i. Requisite Knowledge. Acceptable means of egress devices
 - ii. Requisite Skills. The ability to calculate egress requirements, read plans, and make decisions related to the adequacy of egress
- E. Evaluate hazardous conditions involving equipment, processes, and operations, given field observations and documentation, so that equipment, processes, or operations are installed in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction. (5.3.6)
- i. Requisite Knowledge. Applicable codes and standards, accepted fire protection practices, fire behavior, ignition sources, safe housekeeping practices, and additional reference materials related to protection of hazardous processes and code enforcement
 - ii. Requisite Skills. The ability to observe, communicate, interpret codes, recognize problems, and make decisions
- F. 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 deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction. (5.3.8)
- i. Requisite Knowledge. Flammable and combustible liquids properties and hazards, material safety data sheet, safe handling practices, applicable codes and standards, fire protection systems and equipment approved for the material, fire behavior, safety procedures, and storage compatibility
 - ii. Requisite Skills. The ability to identify typical fire hazards associated with processes or operations utilizing flammable and combustible liquids and to observe, communicate, interpret codes, recognize problems, and make decisions
- G. Evaluate code compliance for storage, handling, and use of hazardous materials, given field observations, so that deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and policies of the jurisdiction. (5.3.9)
- i. Requisite Knowledge. Hazardous materials properties and hazards, material safety data sheet, safe handling practices, applicable codes and standards, fire protection systems and equipment approved for the material, fire behavior, safety procedures, chemical reactions, and storage compatibility
 - ii. Requisite Skills. The ability to identify fire hazards associated with processes or operations utilizing hazardous materials and to observe, communicate, interpret codes, recognize problems, and make decisions
- H. Determine fire growth potential in a building or space, given field observations or plans, so that the contents, interior finish, and construction elements are evaluated for compliance, and deficiencies are identified, documented, and

corrected in accordance with the applicable codes and standards and the policies of the jurisdiction. (5.3.10)

- i. 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
- ii. Requisite Skills. The ability to observe, communicate, interpret codes and standards, recognize hazardous conditions, and make decisions
- I. Verify compliance with construction documents, given a performance-based design, so that life safety systems and building services equipment are installed, inspected, and tested to perform as described in the engineering documents and the operations and maintenance manual that accompanies the design, so that deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction. (5.3.11)
 - i. Requisite Knowledge. Applicable codes and standards for installation and testing of fire protection systems, means of egress, and building services equipment
 - ii. Requisite Skills. The ability to witness and document tests of fire protection systems and building services equipment
- J. 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 deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction (5.3.12)
 - i. 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
 - ii. Requisite Skills. The ability to observe, recognize problems, interpret codes and standards, and write reports

IV Plans Review 30%

- A. Evaluate a building's area, height, occupancy classification and construction type, given an approved set of plans and construction features, so that it is verified that the building is in accordance with applicable codes and standards. (5.3.3)
 - i. 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
 - ii. Requisite Skills. The ability to identify characteristics of each type of building construction and occupancy classification

- B. Evaluate emergency planning and preparedness procedures, given existing or proposed plans and procedures and applicable codes and standards, so that compliance is determined. (5.3.7)
 - i. 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 plans
 - ii. Requisite Skills. The ability to compare submitted plans and procedures with applicable codes and standards adopted by the jurisdiction
- C. Classify the occupancy, given a set of plans, specifications, and a description of a building, so that the classification is made in accordance with the applicable codes and standards and the policies of the jurisdiction. (5.4.1)
 - i. Requisite Knowledge. Occupancy classification, applicable codes and standards, regulations, operational features, and fire hazards presented by various occupancies
 - ii. Requisite Skills. The ability to read plans.
- D. Compute the maximum allowable occupant load, given a floor plan of a building or portion of the building, so that the calculated occupant load is in accordance with the applicable codes and standards and the policies of the jurisdiction. (5.4.2)
 - i. Requisite Knowledge. How to calculate occupant loads for an occupancy and building use, code requirements, regulations, operational features such as fixed seating, and fire hazards presented by various occupancies
 - ii. Requisite Skills. The ability to calculate accurate occupant loads, identify occupancy factors related to various occupancy classifications, use measuring tools, read plans, and use a calculator
- E. Review the proposed installation of fire protection systems, 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 deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction. (5.4.3)
 - i. 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; and evaluation and testing of automatic fire detection and alarm systems and devices
 - ii. Requisite Skills. The ability to read basic floor plans or shop drawings and identify symbols used by the jurisdiction
- F. Review the installation of fire protection systems, given an installed system, 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 deficiencies are identified, documented, and

- reported in accordance with the applicable codes and standards and the policies of the jurisdiction. (5.4.4)
- i. 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; and evaluation and testing of automatic fire detection and alarm systems and devices
 - ii. Requisite Skills. The ability to read basic floor plans or shop drawings
- G.** Verify that means of 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 deficiencies are discovered and communicated in accordance with the policies of the jurisdiction. (5.4.5)
- i. Requisite Knowledge. Applicable codes and standards adopted by the jurisdiction, the identification of standard symbols used in plans, and field verification practices
 - ii. Requisite Skills. The ability to read plans and research codes and standards
- H.** 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. (5.4.6)
- i. 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
 - ii. Requisite Skills. The ability to identify characteristics of each type of building construction

SAMPLE EXAM QUESTIONS

1. A direct pumping system for water supplies does which of the following?
 - A. Provides water by draft connection to a private water supply.
 - B. Delivers water from the source to the distribution system without pumping equipment.
 - C. Pumps water into the distribution system and into elevated storage tanks so demand pressure is maintained.
 - D. Provides water with a pump placed close to the water source to create pressure within the distribution system.

2. What is the minimum height of vertical clearance for fire lanes?
 - A. 12 ft 6 in. (3.8 m)
 - B. 13 ft 6 in. (4.1 m)
 - C. 14 ft 6 in. (4.4 m)
 - D. 15 ft 6 in. (4.7 m)

3. Facilities that provide surgical treatment requiring general anesthesia on an outpatient basis are classified as an ambulatory health care facility when used to provide services at the same time to how many patients?
 - A. One patient
 - B. Two patients
 - C. Three patients
 - D. Four patients

4. Which of the following construction types is permitted for a new, sprinklered, health care facility housed in a two-story building?
 - A. Type II (000)
 - B. Type II (111)
 - C. Type III (211)
 - D. Type III (200)

5. A 75 ft by 60 ft (22.8 m by 18.3 m), single story, grocery store would have an occupant load of how many people?
 - A. 75 people
 - B. 150 people
 - C. 300 people
 - D. 642 people

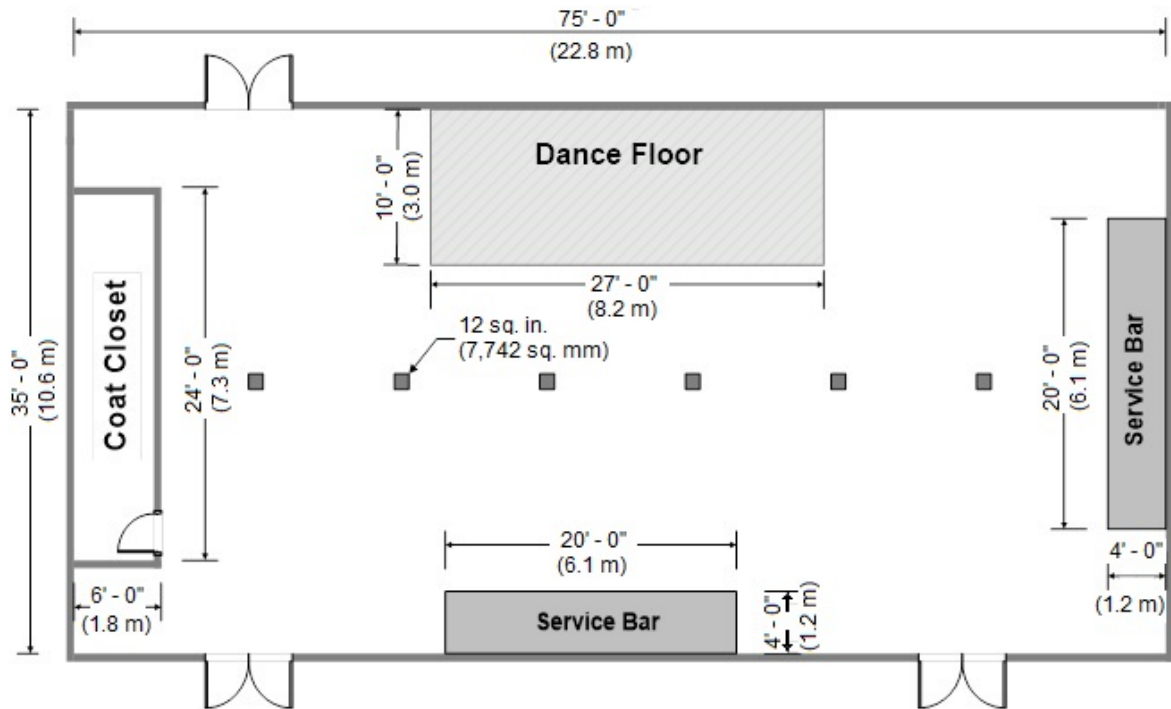
6. Before a connection is made to sprinkler piping, underground mains and lead-in connections to system risers shall be:
 - A. pressurized with 30 psi air to dislodge particulates.
 - B. flushed through a hose for a minimum of three minutes.
 - C. flushed for sufficient time to ensure a thorough cleaning.
 - D. continuously flushed for a minimum of 10 minutes unless on a public water supply.

7. Which of the following is true regarding the level of a fire escape balcony, landing or platform?
- A. They may be 10 in. (254 mm) below the level of the windowsill
 - B. They may be 18 in. (457 mm) below the level of the windowsill
 - C. They may be 20 in. (508 mm) below the level of the windowsill
 - D. They may be 24 in. (610 mm) below the level of the windowsill
8. Which of the following activities involving fire protection systems **does not** require a permit?
- A. Maintenance
 - B. Installation
 - C. Rehabilitation
 - D. Modification
9. Personnel responsible for the use and operation of fire protection equipment provided in tank storage areas shall be trained:
- A. to operate and maintain the equipment with no additional training.
 - B. in the use and operation of the equipment with annual refresher training.
 - C. to operate and maintain the equipment with refresher training every two years.
 - D. in the use and operation of the equipment with refresher training every two years.
10. Which of the following is **NOT** considered an assembly occupancy?
- A. Gymnasium
 - B. Courthouse
 - C. Library
 - D. Museum
11. Who shall maintain records of examinations, approvals, and variances, granted?
- A. Authorized building owner
 - B. Commercial project architect
 - C. Construction project manager
 - D. Authority having jurisdiction
12. What does a plot plan depict?
- A. Architectural details and systems of the building
 - B. Layout of the building's individual floors and the roof
 - C. Number of floors in the building and the grade around the building
 - D. Location of the building with respect to other buildings and streets
13. Remaining impartial in legal proceedings is an important element of which of the following?
- A. Current codes and standards
 - B. Enforcement procedures
 - C. Courtroom behavior
 - D. Complaint handling

14. Who shall retain original records of sprinkler system tests for the life of the system?
- A. Owner
 - B. Manufacturer
 - C. Testing agency
 - D. Fire department
15. In a light hazard occupancy, what is the maximum floor area on any one floor that may be protected by sprinklers on each riser system?
- A. 12,000 ft² (1,115 m²)
 - B. 42 000 ft² (3,902 m²)
 - C. 52,000 ft² (4,831 m²)
 - D. 72,000 ft² (6,689 m²)
16. Dry chemical extinguishing systems are required to be installed in accordance with which NFPA document?
- A. NFPA 12
 - B. NFPA 17
 - C. NFPA 33
 - D. NFPA 2001

Questions 17 – 20 continue on next page

DRAWING A-1 – FOR USE WITH QUESTIONS 17-20



NFPA Fire Inspector II Certification Exam Sample Plan	PROPOSED LODGE FUNCTION HALL		
	FLOOR PLAN		
	DWG NO. A-1	JCJ	REV. 0
	SCALE: 1/8" = 1'-0"	Sept. 9, 2002	SHEET: 1 OF 1

17. What is the gross floor area of the function hall shown in plan A-1?
 - A. 2,045 ft² (190 m²)
 - B. 2,205 ft² (205 m²)
 - C. 2,315 ft² (215 m²)
 - D. 2,625 ft² (244 m²)

18. What is the occupant load of the dance floor shown on Plan A-1?
 - A. 18 people
 - B. 39 people
 - C. 45 people
 - D. 90 people

19. Which of the following factors would be used to calculate the occupant load of the function hall shown on drawing A-1?
 - A. 3 net ft² (0.28 m²)
 - B. 7 net ft² (0.65 m²)
 - C. 15 gross ft² (1.4 m²)
 - D. 100 gross ft² (9.3 m²)

20. What is the required interior finish rating for walls and ceilings of the function hall shown on drawing A-1?

- I. Class A
- II. Class B
- III. Class C
- IV. No requirements

- A. I only
- B. IV only
- C. I and II
- D. I, II and III

Answers to the sample questions are on the following page

SAMPLE EXAM ANSWER KEY

Question	Answer	Reference
1	D	IFSTA Inspection and Code Enforcement pg 470
2	B	NFPA 1: 18.2.3.4.1.2 (2015); 18.2.3.5.1.2 (2018)
3	D	NFPA 101: 3.3.190.1 & 6.1.6.1 (2015); 3.3.196.1 & 6.1.6.1 (2018)
4	B	NFPA 101: Table 18.1.6.1 (2015, 2018)
5	B	NFPA 101: Table 7.3.1.2 and 36+37.1.7 (2015, 2018)
6	C	NFPA 13: 10.10.2.1.2 (2013, 2016)
7	B	NFPA 101: 7.2.8.3.5 (2015, 2018)
8	A	NFPA 1: 1.12.8 and Table 1.12.8(a) (2015, 2018)
9	B	NFPA 1: 66.6.8.2 (2015, 2018)
10	B	NFPA 101: 6.1.2.1 (2015, 2018)
11	D	NFPA 1: 1.11.1 (2015, 2018)
12	D	IFSTA Inspection and Code Enforcement pg 663
13	C	IFSTA Inspection and Code Enforcement pg 23
14	A	NFPA 25: 4.3.3 (2014, 2017)
15	C	NFPA 13: 8.2.1(1) (2013, 2016)
16	B	NFPA 1: 13.8 (2015, 2018)
17	D	NFPA 101: 3.3.21.2.1 (2015); 3.3.22.2.1 (2018)
18	B	NFPA 101: Table 7.3.1.2 and 12.1.7 (2015)
19	B	NFPA 101: Table 7.3.1.2 and 12.1.7 (2015)
20	C	NFPA 101: 12.3.3.3 (2015, 2018)

SAMPLE CODE RESEARCH PROBLEM

A fire inspector is reviewing plans for a modification to existing business occupancy. The facility is provided with automatic sprinklers that met the requirements of NFPA 13 when they were installed. The system is being updated to provide coverage for all areas modified during this project. During the review a dead-end corridor leading to a new interior office area is noted. The plans indicate that the dead-end portion of the corridor is 28 feet (8.5 m) in length. Is this corridor permissible?

A. Key Information (What information is necessary to determine the answer?)

B. Type of issue?

C. Where do you start?

1. Which document(s) address the issue based on the response to A above?

2. What are the applicable code/standard sections? (List them and summarize details.)

D. Based on the applicable documents is the plan acceptable as submitted?

Solution on following page

SAMPLE CODE RESEARCH PROBLEM SUGGESTED SOLUTION

A fire inspector is reviewing plans for a modification to existing business occupancy. The facility is provided with automatic sprinklers that met the requirements of NFPA 13 when they were installed. The system is being updated to provide coverage for all areas modified during this project. During the review a dead-end corridor leading to a new interior office area is noted. The plans indicate that the dead-end portion of the corridor is 28 feet (8.5 m) in length. Is this corridor permissible?

A. Key Information (What information is necessary to determine the answer?)

- *existing business occupancy/new business occupancy*
- *automatic sprinklers*
- *dead end corridor*
- *28 feet (8.5 m) in length*

B. Type of Issue?

Life Safety. Is a 28 ft (8.5 m) dead end corridor permissible in this occupancy?

C. Where do you start?

1. Which document(s) address the issue based on response to A above?

NFPA 101 or NFPA 1

2. What are the applicable code/standard sections? (List them and summarize details.)

NFPA 1 – 14.10.1.5– Exit access shall be arranged so that there are no dead ends in corridors, unless permitted by, and limited to the lengths specified in, Chapters 11 through 43 of NFPA 101. The fire inspector II candidate will note that this is extracted information from NFPA 101. Based on the fact that the dead-end corridor is part of the modification it needs to comply with the new business occupancy requirements in Chapter 38 of NFPA 101. . Looking at new business occupancies 38.2.5.2 permits a 20 foot dead end, 50 feet is permissible where automatic sprinklers are provided.

D. Based on the applicable documents is the plan acceptable as submitted?

The dead end corridor in this case is permissible.

NFPA Certified Fire Inspector II Program



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