

CERTIFICATION CURRICULUM MANUAL

CHAPTER FOUR

FIRE INSPECTOR

NFPA 1031, 2009 Edition

EFFECTIVE JANUARY 1, 2011



Texas Commission on Fire Protection
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BASIC FIRE INSPECTOR

(All three curricula are to be completed for Basic Fire Inspector certification)

SECTION	SUBJECT	RECOMMENDED HOURS
401-4.1,5.1, & 7.1	General	3
401-4.2,5.2,& 7.2	Administration	18
401-4.3, & 5.3	Field Inspection	138
401-4.4, 5.4, & 7.3	Plans Review	37
	TOTAL RECOMMENDED HOURS *	196

*The recommended hours includes time for skills evaluation and is based on 12 students. Hours needed depends on the actual number of students.

BASIC FIRE INSPECTOR

(All three curricula are to be completed for Basic Fire Inspector certification)

FIRE INSPECTOR I		
401-4.1	General	1
401-4.2	Administration	8
401-4.3	Field Inspection	81
401-4.4	Plans Review	0
FIRE INSPECTOR II		
402-5.1	General	1
402-5.2	Administration	4
402-5.3	Field Inspection	57
402-5.4	Plans Review	8
PLAN EXAMINER I		
470-7.1	General	1
470-7.2	Administration	6
470-7.3	Plans Review	29/33
	TOTAL RECOMMENDED HOURS	196 *

*The recommended hours includes time for skills evaluation and is based on 12 students. Hours needed depends on the actual number of students.

**CHAPTER FOUR
FIRE INSPECTOR
COURSE PHASE OUTLINE**

SECTION	SUBJECT	RECOMMENDED HOURS
FIRE INSPECTOR I & II – PHASE I		
401-4.1 402-5.1	General	4
401-4.2.1, 4.2.2, 4.2.4, 4.2.5, 4.2.6 402-5.2.1, 5.2.3, 5.2.4	Administration	3
401-4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.8, 4.3.14, 4.3.15, 4.3.16 402-5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5, 5.3.10, 5.3.12	Field Inspection	27
402-5.4.1, 5.4.2, 5.4.3, 5.4.5	Plans Review	10
	Practical Exercises*	34
	Total Recommended Hours	78
FIRE INSPECTOR I & II – PHASE II		
401-4.1 402-5.1	General	4
401-4.2.1, 4.2.3, 4.2.4 402-5.2.2, 5.2.3, 5.2.5	Administration	6
401-4.3.4, 4.3.6, 4.3.7, 4.3.8, 4.3.9, 4.3.10, 4.3.11, 4.3.12, 4.3.13, 4.3.14, 4.3.15, 402-5.3.3, 5.3.4, 5.3.6, 5.3.7, 5.3.8, 5.3.9, 5.3.10, 5.3.11, 5.3.12, 402-5.4.3, 5.4.4, 5.4.5, 5.4.6	Field Inspection	27
	Plans Review	3
	Practical Exercises*	34
	Review and Comprehensive Final	4
	Total Recommended Hours	78
PLAN EXAMINER – PHASE III		
470-7.1	General	1
470-7.2	Administration	9
470-7.3	Plans Review	30
	Total Recommended Hours	40
TOTAL HOURS RECOMMENDED		196

*The recommended hours for skills evaluation is based on 12 students. Actual hours needed will depend on the number of students, the number of examiners, availability of equipment, and the student skill level.

RECOMMENDED REFERENCE LIST FOR THE BASIC FIRE INSPECTOR CURRICULUM

Certified Training Facilities approved to teach this curriculum must have the following reference materials:

Emergency Response Guidebook, (Current edition). U.S. Department of Transportation

Fire Inspection and Code Enforcement (7th ed.) (2009). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association.

Local Codes and Standards.

NFPA 1031: Standard for Professional Qualifications for Fire Inspector and Plan Examiner (2009 ed.). Quincy, MA: National Fire Protection Association. NFPA Publications.

NFPA 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents (2008 ed.) Quincy, MA: National Fire Protection Association. NFPA Publications.

Plans Examiner for Fire and Emergency Services (1st ed.) (2005). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association.

Standards Manual for Fire Protection Personnel. Austin, TX: Texas Commission on Fire Protection.

Course Instructor Information

Basic Fire Inspector

Overview

The Fire Inspector curriculum is designed to provide clear guidance that ensures adequate presentation of the information required to meet the Job Performance Requirements (JPRs) of National Fire Protection Association (NFPA) 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner, 2009 edition.

The Fire Inspector curriculum is chapter 4 of the Texas Commission on Fire Protection (TCFP) Curriculum Manual.

Certification Level	TCFP Section Number	NFPA 1031 Chapter
Fire Inspector I	401	4
Fire Inspector II	402	5
Plan Examiner I	470	7

Layout

The NFPA numbering sequence is mirrored to allow easy correlation between this document and the NFPA Standard. For example, 401-4.2.1 identifies the section in Fire Inspector that corresponds to NFPA section 4.2.1.

NFPA Appendix Information

When a section references information from “Annex A Explanatory Material” in the NFPA Standard, it is identified by adding an “A” to the section number. For example, 401-A.4.2.5 identifies the section in Inspector I that corresponds to NFPA Annex A information for NFPA section 4.2.5.

TCFP Standards Manual

It is critical that the Course Instructor review the chapters in the TCFP Standards Manual that apply to this curriculum. Of primary importance are the following chapters. Chapter 421, Standards for Certification; Chapter 437, Fees; Chapter 429, Fire Inspector Certification; Chapter 439 (e)(2), Examinations; Chapter 449.5, Certification as Head of a Prevention Only Department. These chapters do not address every issue that could impact this curriculum; therefore, the Course Instructor is encouraged to become familiar with the TCFP Standards Manual.

Supplemental Information

Instructors are expected to provide supplemental information if the main reference text does not provide adequate information to ensure successful completion of the Job Performance Requirements as listed in the curriculum.

Components of the Curriculum

Each section of the curriculum identifies the NFPA Job Performance Requirement (JPR) and subdivides the requisite knowledge requirements into learning components. For example:

Curriculum	Explanation
401-4.2.6 Participate in legal proceedings, given the findings of a field inspection or a complaint and consultation with legal counsel, so that all information is presented and the inspector's demeanor is professional.	Section Number and NFPA JPR
Requisite Knowledge: The legal requirements pertaining to evidence rules in the legal system and types of legal proceedings.	Requisite Knowledge Statement
1. The legal requirements pertaining to evidence rules in the legal system	First part of Requisite Knowledge
2. Types of legal proceedings <ul style="list-style-type: none"> a. Appeals <ul style="list-style-type: none"> i. Appeals boards ii. Appeals hearings b. Criminal c. Civil 	Second part of Requisite Knowledge
Requisite Skills: The ability to maintain a professional courtroom demeanor, communicate, listen, and differentiate facts from opinions.	Requisite Skills Statement

Skills

NFPA Requisite Skill requirements are addressed in the corresponding Skill Sheets. The skills are combined depending on whether the skill relates to General, Field Inspection, Administration, or Plans Review.

Descriptions of Certification Levels

The **Fire Inspector I** conducts basic fire inspections and applies codes and standards.

The **Fire Inspector II** conducts most types of inspections and interprets applicable codes and standards.

The **Plan Examiner I** analyzes building construction, hazardous processes and architectural drawings or plans to ensure compliance with building and fire codes.

CERTIFICATION CURRICULUM MANUAL – CHAPTER FOUR

INSPECTOR I

SECTION 401

INSPECTOR I

401-4.1 **General**

The Fire Inspector I shall meet the job performance requirements defined in Sections 4.2 through 4.4. In addition, the Fire Inspector I shall meet the requirements of Section 4.2 of NFPA 472.

401-4.2 **Administration**

This duty involves the preparation of correspondence and inspection reports, handling of complaints, and maintenance of records, as well as participation in legal proceedings and maintenance of an open dialogue with the plan examiner and emergency response personnel, according to the following job performance requirements.

- 401-4.2.1** Prepare inspection reports, given agency policy and procedures, and observations from an assigned field inspection, so that the report is clear and concise and reflects the findings of the inspection in accordance with the applicable codes and standards and the policies of the jurisdiction.

Requisite Knowledge:

1. Applicable codes and standards adopted by the jurisdiction
 - a. Model codes
 - b. Model code organizations
 - i. International Code Council (ICC)
 - ii. Legacy codes
 - iii. Building Officials and Code Administrators International (BOCA)
 - iv. International Conference of Building Officials (ICBO)
 - v. Southern Building Code Congress International (SBCCI)
 - vi. National Fire Protection Association (NFPA)
 - c. Code adoption
2. Policies of the jurisdiction
 - a. Inspection priorities and frequency
 - i. Permit model
 - ii. Inspection model

Requisite Skills: The ability to conduct a field inspection, apply codes and standards, and communicate orally and in writing.

- 401-4.2.2** Recognize the need for a permit, given a situation or condition, so that requirements for permits are communicated in accordance with the applicable codes and standards and the policies of the jurisdiction.

Requisite Knowledge:

1. Permit policies of the jurisdiction

2. Rationale for the permit

Requisite Skills: The ability to communicate orally and in writing.

- 401-4.2.3** Recognize the need for plan review, given a situation or condition, so that requirements for plan reviews are communicated in accordance with the applicable codes and standards and the policies of the jurisdiction.

Requisite Knowledge:

1. Plan review policies of the jurisdiction
2. Rationale for the plan review

Requisite Skills: The ability to communicate orally and in writing.

- 401-4.2.4** Investigate common complaints, given a reported situation or condition, so that complaint information is recorded, the AHJ-approved process is initiated, and the complaint is resolved.

Requisite Knowledge:

1. Applicable codes and standards adopted by the jurisdiction
2. Policies of the jurisdiction

Requisite Skills: The ability to apply codes and standards, communicate orally and in writing, recognize problems, and resolve complaints.

- 401-4.2.5** Identify the applicable code or standard, given a fire protection, fire prevention, or life safety issue, so that the applicable document, edition, and section are referenced.

Requisite Knowledge:

1. Applicable codes adopted by the jurisdiction
2. Applicable standards adopted by the jurisdiction

Requisite Skills: The ability to apply codes and standards.

- 401-4.2.6** Participate in legal proceedings, given the findings of a field inspection or a complaint and consultation with legal counsel, so that all information is presented and the inspector's demeanor is professional.

Requisite Knowledge:

1. The legal requirements pertaining to evidence rules in the legal system
 - a. Texas Rules of Evidence
2. Types of legal proceedings
 - a. Appeals
 - i. Appeals boards

- ii. Appeals hearings
- b. Criminal
- c. Civil

3. Hearing preparation

Requisite Skills: The ability to maintain a professional courtroom demeanor, communicate, listen, and differentiate facts from opinions.

401-4.3

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.

401-4.3.1

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

Requisite Knowledge:

1. Occupancy classification types
2. Applicable codes, regulations and standards adopted by the jurisdiction
3. Operational features
4. Fire hazards presented by various occupancies

Requisite Skills: The ability to make observations and correct decisions.

401-4.3.2

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.

Requisite Knowledge:

1. Occupancy classification types
 - a. Function of space
 - b. Net floor area
 - c. Gross floor area
2. Applicable codes, regulations, and standards adopted by the jurisdiction
 - a. International Building Code (IBC)
 - b. National Fire Protection Association (NFPA)
 - c. Other regulatory agencies
3. Operational features
4. Fire hazards presented by various occupancies
5. Occupant load factors - function

Requisite Skills: The ability to calculate occupant loads, identify occupancy factors related to various occupancy classifications, use measuring tools, and make field sketches.

401-4.3.3 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 deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

Requisite Knowledge:

1. Applicable codes and standards adopted by the jurisdiction related to means of egress
2. Maintenance requirements of egress elements
3. Types of construction
4. Occupancy egress requirements
 - a. Examples of means of egress elements include:
 - i. Exit access
 - ii. Exit
 - iii. Exit enclosures
 - iv. Exit discharges
 - v. Exit travel distances
 - vi. Common path of travel
 - vii. Arrangement
 - viii. Exit passageway
 - ix. Delayed egress (Access controlled)
 - x. Accessible means of egress
 - xi. Areas of refuge
 - xii. Capacity
 - xiii. Stairways
 - xiv. Ramps
 - xv. Corridors
 - xvi. Doors
 - xvii. Hardware
 - xviii. Exit markings
 - xix. Illumination
5. The relationship of fixed fire protection systems to egress requirements and to approved means of egress, including, but not limited to, doors, hardware, and lights

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

401-4.3.4 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 identified and recorded in accordance with the applicable codes and standards and the policies of the jurisdiction.

Requisite Knowledge:

1. Applicable codes and standards adopted by the jurisdiction
2. Types of construction classification
 - a. Height and area dimensions
 - b. Construction type
 - c. Construction materials
3. Rated construction components
4. Accepted building construction methods and materials

Requisite Skills: The ability to read plans, make decisions, and apply codes and standards.

401-4.3.5 Determine the operational readiness of existing fixed fire suppression systems, given test documentation and field observations, so that the systems are in an operational state, maintenance is documented, and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

401-A.4.3.5 Fire Inspectors should be able to confirm the operational status of fixed extinguishing systems by visual inspection of the control panels for automatic suppression systems (e.g., dry chemical systems, Halon, CO₂, and clean agent systems), automatic fire pumps and booster pumps, and 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, spring testing underground water supply control valves, inspecting water levels in tanks and reservoirs, and observing sprinkler system drain tests. Periodic inspections and tests should be documented as noted in the applicable NFPA standards.

Requisite Knowledge:

1. A basic understanding of the components and operation of fixed fire suppression systems
 - a. Sprinkler systems
 - b. Types of sprinklers
 - c. Standpipes
 - d. Other extinguishing systems
2. Applicable codes and standards

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

401-4.3.6 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.

401-A.4.3.6 Fire Inspectors 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 applicable NFPA standards. To meet this requirement, the fire inspector 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, sprinkler or standpipe main drain tests, and so forth.

Requisite Knowledge:

1. A basic understanding of the components and operation of fire detection and alarm systems and devices
2. Applicable codes and standards

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

401-4.3.7 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 deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

401-A.4.3.7 Fire Inspectors 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, and checking that they are correctly located and marked. Extinguishers should also be confirmed to be appropriate for the hazard.

Requisite Knowledge:

1. A basic understanding of portable fire extinguishers
 - a. Components
 - b. Placement
2. Applicable codes and standards

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

401-4.3.8 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 deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

Requisite Knowledge:

1. Practices and techniques of code compliance inspections
2. Fire behavior
3. Fire prevention practices
4. Ignition sources
5. Safe housekeeping practices
6. Classification of hazardous materials
7. Dust hazard processes
8. Kitchen hood and ducts
9. Dip tanks
10. Flammable finishing operations
11. Flammable and combustible liquids storage, dispensing, and use
12. Welding and thermal cutting operations
13. Dipping and coating operations
14. Quenching operations
15. Dry cleaning operations
16. Asphalt and tar kettles
17. Semiconductor/Electronics manufacturing

Requisite Skills: The ability to observe, communicate, apply codes and standards, recognize problems, and make decisions.

401-4.3.9 Compare an approved plan to an existing 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 applicable codes and standards and the policies of the jurisdiction.

Requisite Knowledge:

1. Fire protection symbols
2. Terminology

Requisite Skills: The ability to read and comprehend plans for fire protection systems, observe, communicate, apply codes and standards, recognize problems, and make decisions.

- 401-4.3.10** 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 deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

Requisite Knowledge:

1. Requirements relative to emergency evacuation drills that are required within the jurisdiction
 - a. Emergency planning
 - b. Emergency preparation
2. Ways to conduct and/or evaluate fire drills in various occupancies
 - a. Fire drills
 - b. Announcements
 - c. Evacuation plans
 - d. Fire department access
 - e. Response personnel
 - f. Standby personnel
3. Human behavior during fires and other emergencies

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

- 401-4.3.11** Inspect emergency access for an existing site, given field observations, so that the required access for emergency responders is maintained and deficiencies are identified, documented, and corrected in accordance with the applicable codes, standards, and policies of the jurisdiction.

- A.4.3.11** Emergency access includes emergency vehicle access roadways, pathway access from roadways to the building, key box facilities, gate access, and door access into structures. The Fire Inspector I is expected to be able to find and correct deficiencies and obstructions to fire and emergency personnel access into buildings, such as blocked roadways, missing or outdated keys in key boxes, locked gates, and inaccessible doors. Actual response operations, safe zones, and vehicle size, width, and turning capabilities should be evaluated for a given site. For sites with topographical limitations, such as a riverfront or mountainside setting, alternate methods to provide access should be evaluated based upon the

requirements of the responding personnel to approach and address incidents within the site.

Requisite Knowledge:

1. Applicable codes and standards
2. Policies of the jurisdiction
3. Emergency access and accessibility requirements

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

401-4.3.12 Verify code compliance for incidental storage, handling, and use of flammable and combustible liquids and gases, given field observations and inspection guidelines from the AHJ, so that applicable codes and standards are addressed and deficiencies are identified, documented, in accordance with the applicable codes and standards and the policies of the jurisdiction.

401-A.4.3.12 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 nominal amounts, referred to as incidental or exempt amounts, depending on the code adopted by the jurisdiction, are needed for normal maintenance or daily operations could include cleaning fluids, lubricating oils, or propane for a forklift. Once incidental or exempt amounts are exceeded, additional building and fire requirements are triggered. At that point, the inspection should be referred to the Fire Inspector II.

Requisite Knowledge:

1. Classification
2. Properties
3. Labeling
4. Storage
5. Handling
6. Use of incidental amounts of flammable and combustible liquids and gases
7. Applicable codes and standards (Incidental or exempt amounts allowed)

Requisite Skills: The ability to observe, communicate, apply codes and standards, recognize problems, and make decisions.

401-4.3.13 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 addressed and all deficiencies are

identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

401-A.4.3.13 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 or used for maintenance purposes or operation of equipment. They 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 incidental or exempt amounts are exceeded — whether in storage, use, or wholesale/retail sales settings — additional building and fire requirements are triggered. At that point, the inspection should be referred to the Fire Inspector II.

Requisite Knowledge:

1. Classification
2. Properties
3. Labeling
4. Transportation
5. Storage
6. Handling
7. Use of hazardous materials
8. Applicable codes and standards (Incidental or exempt amounts allowed)
9. Hazardous Materials Awareness Level Personnel ((NFPA 472, *Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents* section 4.2 – Analyzing the Incident)
 - a. The Fire Inspector candidate shall identify and be able to describe the purpose, goals, and definitions of the NFPA standards applicable to Hazardous Materials/WMD.
 - b. The Fire Inspector candidate shall demonstrate knowledge of safety principles applicable to hazardous materials /WMD response.
 - c. The Fire Inspector candidate shall identify how hazardous materials incidents are different from other emergencies.
 - d. The Fire Inspector candidate shall identify principles pertaining to the recognition of hazardous materials/WMD.
 - e. The Fire Inspector candidate shall identify the definition of hazardous materials/WMD.
 - f. The Fire Inspector candidate shall identify the following nine UN/DOT hazardous classes or divisions and give examples of common materials in each hazard class or division, and the primary hazards associated with each hazard class or division.

- i. Class 1 – Explosives
 - ii. Class 2 – Gases
 - iii. Class 3 – Flammable liquids
 - iv. Class 4 – Flammable solids
 - v. Class 5 – Oxidizers
 - vi. Class 6 – Non-gaseous poisonous materials
 - vii. Class 7 – Radioactive material
 - viii. Class 8 – Corrosive
 - ix. Class 9 – Miscellaneous
- g. The Fire Inspector candidate shall identify typical occupancies and locations in the community or facility where hazardous materials /WMD are manufactured, transported, stored, used or disposed of.
- h. The Fire Inspector candidate, given various examples of typical container shapes, shall identify:
- i. Those which may contain a hazardous material /WMD
 - ii. Those which would contain liquids, gases, or solids
 - iii. Markings on fixed facility containers that would indicate:
 - a) Size of container
 - b) Product contained
 - c) Site identification numbers
- i. The Fire Inspector candidate shall identify facility and transportation markings and colors that indicate hazardous materials/WMD, including the following:
- i. Transportation markings, including UN/NA identification number marks, marine pollutant mark, elevated temperature (HOT) mark, commodity markings, and inhalation hazard mark
 - ii. NFPA 704, Standard System for the Identification of the Hazards of Materials for Emergency Response, markings
 - iii. Military hazardous materials/WMD markings
 - iv. Special hazard communication markings for each hazard class
 - v. Pipeline markings
 - vi. Container markings
- j. The Fire Inspector candidate, given an example of an NFPA 704 marking, shall identify the significance of the following components.
- i. Five degrees of hazard - (4-0)
 - ii. Three categories of hazard
 - a) Health - Blue color
 - b) Flammability - Red color
 - c) Reactivity - Yellow color
 - d) Special information – White color
 - iii. Special hazards that may be indicated
 - a) ACID - Acid
 - b) ALK - Alkali
 - c) COR- Corrosive
 - d) OX – Oxidizer
 - e) W – Reacts with water
- k. The Fire Inspector candidate shall identify and describe U.S. and Canadian placards and labels that would indicate hazardous materials/WMD.

- I. The Fire Inspector candidate shall identify the following information from material safety data sheets (MSDS) and shipping papers that indicates hazardous materials/WMD.
 - i. The Fire Inspector candidate shall identify where to find MSDS
 - a) Manufacturer
 - b) CHEMTREC
 - c) Shipper
 - d) Fixed facility
 - ii. Entries on an MSDS that indicate the presence of hazardous materials/WMD containers by their shape
 - iii. The Fire Inspector candidate shall identify the following in regards to shipping papers:
 - a) Information that would indicate the presence of hazardous materials/WMD
 - b) Name of the shipping papers in regards to the mode of transportation
 - i) Air - Air Bill
 - ii) Highway - Bill of Lading or Freight Bill
 - iii) Water - Dangerous Cargo Manifest
 - iv) Rail - Waybill and/or Consist
 - c) Where the shipping papers are found in each mode of transportation
 - d) The person responsible for having the shipping papers in each mode of transportation
 - e) Where the shipping papers may be found in an emergency in each mode of transportation
 - m. The Fire Inspector candidate shall identify examples of clues (other than occupancy/location, container shape, markings/color, placards/labels, MSDS, and shipping papers) that use the senses of sight, sound, and odor to indicate hazardous materials/WMD.
 - i. Odors
 - ii. Gas leak
 - iii. Fire
 - iv. Vapor cloud
 - v. Visible corrosive actions
 - vi. Visible chemical reactions
 - vii. Pooled liquids
 - viii. Sound of a pressure release
 - ix. Condensation line on pressure tank
 - x. Injured persons or casualties
 - n. The Fire Inspector candidate shall describe the limitations of using the senses in determining the presence or absence of hazardous materials/WMD.
 - o. The Fire Inspector candidate shall identify at least four types of locations that could become targets for criminal or terrorist activity using hazardous materials/WMD.
 - i. Public assembly
 - ii. Public building
 - iii. Mass transit system
 - iv. Places with high economic impact

- v. Telecommunications facilities
- vi. Places with historical or symbolic significance
- vii. Military installations
- viii. Airports
- ix. Industrial facilities
- p. The Fire Inspector candidate shall describe the difference between a chemical and a biological incident.
- q. The Fire Inspector candidate shall identify at least four indicators of possible criminal or terrorist activity involving chemical agents.
- r. The Fire Inspector candidate shall identify at least four indicators of possible criminal or terrorist activity involving biological agent
- s. The Fire Inspector candidate shall identify at least four indicators of possible criminal or terrorist activity involving radiological agents.
- t. The Fire Inspector candidate shall identify at least four indicators of possible criminal or terrorist activity involving illicit laboratories (clandestine laboratories, weapons lab, and ricin lab).
- u. The Fire Inspector candidate shall identify at least four indicators of possible criminal or terrorist activity involving explosives.
- v. The Fire Inspector candidate shall identify at least four indicators of secondary devices.
- w. The Fire Inspector candidate shall identify the hazardous materials/WMD in each situation by name, UN/NA identification number, or type placard applied, and meet the following requirements, given examples of facility and transportation situations involving hazardous materials/WMD:
 - i. Identify difficulties in determining specific names of hazardous materials/WMD in both facilities and transportation.
 - ii. Identify sources for obtaining the names of, UN/NA identification numbers for, or types of placard associated with hazardous materials/WMD in transportation.
 - iii. Identify sources for obtaining the names of hazardous materials/WMD in a facility.
- x. The Fire Inspector candidate, utilizing the most current edition of the DOT Emergency Response Guidebook, shall:
 - i. Identify the three methods for determining the appropriate guide page for a specific hazardous material/WMD.
 - a) Locate UN number in the yellow-bordered pages.
 - b) Locate name of material in the alphabetic listing in the blue-bordered pages.
 - c) Locate a matching placard in the table of placards and consult the two-digit guide number located next to the similar placard.
 - ii. Identify at least two general types of hazards found on each guide page.
 - a) Fire
 - b) Explosion
 - c) Health

Requisite Skills: The ability to observe, communicate, apply codes and standards, recognize problems, and make decisions.

401-4.3.14 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 applicable codes and standards and the policies of the jurisdiction.

Requisite Knowledge:

1. Basic fire behavior
2. Flame spread ratings of contents
3. Smoke development ratings of contents
4. Interior finishes
5. Building construction elements
6. Decorations
7. Decorative materials
8. Furnishings
9. Safe housekeeping practices

Requisite Skills: The ability to observe, communicate, apply codes and standards, recognize hazardous conditions, and make decisions.

401-4.3.15 Determine code compliance, given the codes, standards, and policies of the jurisdiction and a fire protection issue, so that the applicable codes, standards, and policies are identified and compliance is determined.

401-A.4.3.15 The Fire Inspector should be able to identify the correct code, standard, or policy, including edition, and correctly interpret and apply the adopted codes, standards, and referenced documents.

Requisite Knowledge:

1. Basic fire behavior
2. Flame spread ratings of contents
3. Smoke development ratings of contents
4. Interior finishes
5. Building construction elements
6. Life safety systems

7. Decorations
8. Decorative materials
9. Furnishings
10. Safe housekeeping practices

Requisite Skills: The ability to observe, communicate, apply codes and standards, recognize hazardous conditions, and make decisions.

401-4.3.16 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 deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

Requisite Knowledge:

1. Types of water distribution systems
2. Other water sources in the local community
3. Water distribution system testing
4. Characteristics of public water supply systems
5. Characteristics of private water supply systems
6. Flow testing procedures

Requisite Skills: The ability to use Pitot tubes, gauges, and other data gathering devices as well as calculate and graph fire flow results.

401-4.4

Plans Review

There are no plan review job performance requirements for Fire Inspector I.

CERTIFICATION CURRICULUM MANUAL – CHAPTER FOUR

INSPECTOR II

SECTION 402

INSPECTOR II

402-5.1

General

The Fire Inspector II shall meet the job performance requirements defined in Chapter 4 and Sections 5.2 through 5.4.

402-5.2

Administration

This duty involves conducting research, interpreting codes, implementing policy, testifying at legal proceedings, and creating forms and job aids, according to the following job performance requirements.

402-5.2.1

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.

Requisite Knowledge:

1. Permit application process
2. Applicable codes, standards, policies, and procedures of the jurisdiction

Requisite Skills: The application of the requisite knowledge.

402-5.2.2

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.

Requisite Knowledge:

1. Plan review application process
2. Code requirements of the jurisdiction
3. Policies and procedures of the jurisdiction

Requisite Skills: The ability to communicate orally and in writing on matters related to code requirements, policies, and procedures of the jurisdiction.

402-5.2.3

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.

402-A.5.2.3

The objective of a complaint investigation is the recognition and correction or removal of a fire or life safety hazard. At this professional level, the resolution of the complaint will depend heavily on the technical evaluation of the complaint and the selection of possible corrective actions. More than one solution might be available.

Requisite Knowledge:

1. Applicable codes and standards adopted by the jurisdiction
2. Policies of the jurisdiction

Requisite Skills: The ability to interpret codes and standards, recognize problems, and refer complaints to other agencies when required.

402-5.2.4 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.

402-A.5.2.4 Local or regional modifications to codes and standards developed through the consensus process can be made to address specific local environmental and societal factors with adequate input from affected parties and oversight by the jurisdiction's governing body. Such modifications should be based on substantiated information, compiled and presented to justify the impacts of the regulation or modification proposed. Data professionally presented can support a request for a governing body to modify a code or a standard far more effectively than supposition or fear.

Requisite Knowledge:

1. State statutes or local ordinances establishing or empowering the agency to adopt, enforce, and revise codes and standards
2. The legal instruments establishing or adopting codes and standards
3. The development and adoption process for fire and life safety legislation or regulations

Requisite Skills: The ability to recognize problems, collect and develop potential solutions, and identify cost/risk benefits.

402-5.2.5 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.

402-A.5.2.5 Mandated inspection frequencies, follow-up visits, and timely response to complaints require good time-management skills of the Fire Inspector and a coordinated management program. Improvements in the delivery of inspection services can often be originated at the inspector level.

Requisite Knowledge:

1. Policies and procedures of the jurisdiction related to code enforcement
2. Sources of detailed and technical information relating to fire protection and life safety
 - a. Fire loss data
 - i. Local (e.g., fire department reporting system)
 - ii. State (e.g. Texas Fire Incident Reporting System – TEXFIRS)

- iii. Federal (e.g., National Fire Incident Reporting System – NFIRS, National Institute of Occupational Safety and Health – NIOSH, US Fire Administration, National Fire Academy)
- iv. NFPA
- b. Loss prevention bulletins (e.g. Factory Mutual Global, Consumer Product Safety Commission, Underwriter’s Laboratory)

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.

402-5.3 **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 performance requirements.

- 402-5.3.1** 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 applicable codes and standards.

Requisite Knowledge:

- 1. How to calculate occupant loads for an occupancy
- 2. How to calculate occupant loads for building use
- 3. Code requirements presented by various occupancies
 - a. International Building Code (IBC)
 - b. National Fire Protection Association (NFPA)
- 4. Regulations presented by various occupancies
 - a. Local regulatory agencies
 - b. Other regulatory agencies
- 5. Operational features presented by various occupancies
- 6. Fire hazards presented by various occupancies

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.

- 402-5.3.2** Identify the occupancy classifications of a mixed-use building, given a description of the uses, so that each area is classified in accordance with applicable codes and standards.

- 402-A.5.3.2** Judgment should be exercised in the classification of occupancies within a mixed-use building. Small uses that are accessory to a major occupancy should be evaluated within the framework of the adopted codes and standards,

recognizing that not all spaces require separation while some spaces will always require separation.

Requisite Knowledge:

1. Occupancy classification presented by various occupancies
 - a. Building code use
 - b. Use groups
 - c. Incidental use area
 - d. Accessory use area
2. Applicable codes, and standards presented by various occupancies
 - a. IBC
 - b. NFPA
3. Operational features presented by various occupancies
4. Fire hazards presented by various occupancies

Requisite Skills: The ability to interpret code requirements and recognize building uses that fall into each occupancy classification.

402-5.3.3 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.

402-A.5.3.3 The Fire Inspector II should be able to assess proper construction type based on new construction or changes to a building that have occurred since the original occupancy of the building. Examples of such changes may include renovations or additions, changes in storage commodity, changes in occupancy classification, and similar changes that might occur throughout the life of a building.

Requisite Knowledge:

1. Building construction with emphasis on fire-rated construction
2. Evaluation of methods of construction
3. Assemblies for fire rating
4. ~~3.~~ Analysis of test results
5. ~~4.~~ Manufacturer's specifications

Requisite Skills: The ability to identify characteristics of each type of building construction and occupancy classification.

402-5.3.4 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. Evaluate installation for compliance with applicable codes and standards so that

deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

- 402-A.5.3.4** Includes buildings under construction or demolition. Building documentation includes performance-based design documents to ensure input features remain applicable to the building as it is currently configured. The design documentation should include an Operations and Maintenance Manual, which acts as a user guide to the performance-based design. The Operations and Maintenance Manual includes the assumptions and estimates made during the design regarding concepts such as selected fire scenarios and fuel loads, building use, occupant characteristics, and system reliability. The inspector should be able to compare these original assumptions and estimates to those that would be used to evaluate the building as it is currently configured.

Requisite Knowledge:

1. Applicable codes and standards for fire protection systems
2. Basic physical science as it relates to fire behavior and fire suppression
3. Implications and hazards associated with system operation
4. Installation techniques
5. Acceptance inspection
6. Testing
7. Reports of maintenance of completed installations
8. Use and function of various systems

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

- 402-5.3.5** 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.

Requisite Knowledge: Acceptable means of egress devices.

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

- 402-5.3.6** Evaluate hazardous conditions involving equipment, processes, and operations, given field observations and 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.

- 402-A.5.3.6 The Fire Inspector II is expected to have knowledge of processes and operations that include milling operations and the manufacture, storage, and use of hazardous chemicals and explosives.

Requisite Knowledge:

1. Applicable codes and standards
2. Accepted fire protection practices
3. Fire behavior
4. Ignition sources
5. Safe housekeeping practices
6. Additional reference materials related to protection of hazardous processes and code enforcement.

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

- 402-5.3.7 Evaluate emergency planning and preparedness procedures, given existing or proposed plans and procedures and applicable codes and standards, so that compliance is determined.

- 402-A.5.3.7 Emergency planning might include components for building evacuation, sheltering of occupants in place, and securing occupants from outside threats.

Requisite Knowledge:

1. Occupancy requirements for emergency evacuation plans
2. Fire safety programs for crowd control
3. Roles of agencies and individuals in implementation and development of emergency plans
4. Information sources for emergency evacuation plans
 - a. Other occupancies with approved plans
 - b. Other jurisdictions
 - c. Emergency response agencies (e.g. Red Cross)

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

- 402-5.3.8 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.

Requisite Knowledge:

1. Flammable and combustible liquids properties and hazards
2. Material safety data sheet
3. Safe handling practices
4. Applicable codes and standards
 - a. Quantity
 - b. Limits
5. Fire protection systems and equipment approved for the material
6. Fire behavior
7. Safety procedures
8. Storage compatibility

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.

- 402-5.3.9** Evaluate code compliance for the 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 the policies of the jurisdiction.

Requisite Knowledge:

1. Hazardous materials properties and hazards
2. Material safety data sheet
3. Safe handling practices
4. Applicable codes and standards
 - a. Quantity
 - b. Limits
5. Fire protection systems
6. Equipment approved for the material
7. Fire behavior
8. Safety procedures

9. Chemical reactions

10. Storage compatibility

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.

402-5.3.10 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.

402-A.5.3.10 Fire growth is dependent on several factors, including heat content of the materials involved, exposed surface area, material height and array, continuity of combustible materials within a space, ceiling height, and ventilation or openness of the space. Availability of an ignition source is usually not considered since fire growth is evaluated on the assumption that a fire has already begun and is not predicated on whether a fire will or will not start.

Requisite Knowledge:

1. Basic fire behavior
2. Flame spread ratings of contents
3. Smoke development ratings of contents
4. Interior finishes
5. Building construction elements
6. Decorations
7. Decorative materials
8. Furnishings
9. Safe housekeeping practices

Requisite Skills: The ability to observe, communicate, interpret codes and standards, recognize hazardous conditions, and make decisions.

402-5.3.11 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.

- 402-A.5.3.11 Performance-based design involves the evaluation of risk through a systematic process. See Rose, Flamberg, and Leverenz, *Guidance Document for Incorporating Risk Concepts into NFPA Codes and Standards*, for further information.

Requisite Knowledge:

1. Applicable codes and standards for installation and testing of fire protection systems
 - a. Fire sprinklers (e.g. NFPA 13)
 - b. Standpipe systems (e.g. NFPA 14)
 - c. Fire alarm systems (e.g. NFPA 72)
 - d. Fire pumps (e.g. NFPA 20)
 - e. Means of egress (e.g. International Building Code or NFPA 101)
 - f. Smoke control (e.g. International Building Code or NFPA 92A)
 - g. Emergency and/or standby power requirements (e.g. International Building Code and applicable electrical code(s))
 - h. Heating Ventilation Air Conditioning (HVAC) (e.g. International Mechanical Code, NFPA 90A)
 - i. Elevator and moving pedestrian equipment (e.g. International Building Code)
2. Means of egress
3. Building services equipment

Requisite Skills: The ability to witness and document tests of fire protection systems and building services equipment.

- 402-5.3.12 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.

- 402-A.5.3.12 The Fire Inspector II should coordinate that have other agencies within the jurisdiction with expertise in the area of mechanical equipment to provide a uniform approach to achieve a fire-safe environment.

Requisite Knowledge:

1. Types of building service equipment
2. Installation of building service equipment
3. Maintenance of building service equipment
4. Use of building service equipment

5. Operation of smoke and heat vents
6. Installation of kitchen cooking equipment (including hoods and ducts)
7. Installation of laundry chutes
8. Installation of elevators
9. Installation of escalators
10. Applicable codes and standards adopted by the jurisdiction

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

402-5.4

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.

402-5.4.1

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.

Requisite Knowledge:

1. Occupancy classification of various occupancies
2. Applicable codes and standards of various occupancies
3. Regulations for various occupancies (e.g. applicable state licensing rules, Texas Health and Safety Code)
4. Operational features presented by various occupancies
5. Fire hazards presented by various occupancies
 - a. Assembly (e.g. decorations)
 - b. Business (e.g. combustible waste)
 - c. Education (e.g. ignition sources)
 - d. Factory/Industrial (e.g. fabrication)
 - e. High-hazard (e.g. hazardous materials)
 - f. Institutional (e.g., egress)
 - g. Mercantile (e.g., fire load)
 - h. Residential (e.g., occupant activities)
 - i. Storage (e.g., storage arrangement)
 - j. Utility/miscellaneous (e.g. combustible waste)

Requisite Skills: The ability to read plans.

402-5.4.2 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.

Requisite Knowledge:

1. How to calculate occupant loads for an occupancy and building use
2. Code requirements
3. Regulations
4. Operational features such as fixed seating
5. Fire hazards presented by various occupancies
 - a. Assembly (e.g. decorations)
 - b. Business (e.g. combustible waste)
 - c. Education (e.g. ignition sources)
 - d. Factory/Industrial (e.g. fabrication)
 - e. High-hazard (e.g. hazardous materials)
 - f. Institutional (e.g., egress)
 - g. Mercantile (e.g., fire load)
 - h. Residential (e.g., occupant activities)
 - i. Storage (e.g., storage arrangement)
 - j. Utility/miscellaneous (e.g. combustible waste)
6. Mixed-use occupancies
 - a. Incidental use areas
 - b. Accessory use areas
7. Design Occupant Load
 - a. Actual occupant load
 - b. Occupant load factors
 - c. Occupant load combinations
 - d. Increased occupant load
8. Posting of occupant load
9. Outdoor area occupant loads

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.

402-5.4.3 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.

Requisite Knowledge:

1. Proper selection, distribution, location, and testing of portable fire extinguishers (e.g. NFPA 10, International Fire Code)
2. methods used to evaluate the operational readiness of water supply systems used for fire protection (e.g. NFPA 24, 25, 13, 14)
3. Evaluation and testing of automatic sprinkler, water spray, and standpipe systems and fire pumps (e.g. NFPA 13, 14, 17, 20)
4. Evaluation and testing of fixed fire suppression systems (e.g. NFPA 15, 16, 17A, 18, 19)
5. Evaluation and testing of automatic fire detection and alarm systems and devices (e.g. NFPA 72, International Fire Code)

Requisite Skills: The ability to read basic floor plans or shop drawings and identify symbols used by the jurisdiction.

- 402-5.4.4 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.

Requisite Knowledge:

1. Proper selection, distribution, location and testing of portable fire extinguishers
2. Methods used to evaluate the operational readiness of water supply systems used for fire protection
3. Evaluation and testing of automatic sprinkler, water spray, and standpipe systems and fire pumps
4. Evaluation and testing of fixed fire suppression systems
5. Evaluation and testing of automatic fire detection and alarm systems and devices

Requisite Skills: The ability to read basic floor plans or shop drawings.

- 402-5.4.5 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.

Requisite Knowledge:

1. Applicable codes and standards adopted by the jurisdiction
2. Identification of standard symbols used in plans
3. Field verification practices

Requisite Skills: The ability to read plans and research codes and standards.

402-5.4.6

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.

Requisite Knowledge:

1. Building construction with emphasis on fire-rated construction
2. Evaluation of methods of construction and assemblies for fire rating
3. Analysis of test results
4. Manufacturer's specifications

Requisite Skills: The ability to identify characteristics of each type of building construction.

CERTIFICATION CURRICULUM MANUAL – CHAPTER FOUR

PLANS EXAMINER I

SECTION 470

PLAN EXAMINER I

470-7.1

General

The Plan Examiner I shall meet the job performance requirements defined in Sections 7.2 and 7.3.

470-7.2

Administration

This duty involves the review of plans, preparation of correspondence and plan review reports, communication with fire inspectors and emergency response personnel, handling of complaints, maintenance of records, participation in legal proceedings, identification of when additional expertise is required, and familiarity with procedures used by the jurisdiction to evaluate alternative methods, according to the following job performance requirements.

470-7.2.1

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

Requisite Knowledge:

1. Codes and standards
 - a. Reasons for construction permits
 - b. Ordinances
 - c. Code amendments
 - d. Code models
 - e. Code types
 - f. Code references
 - g. Plans review checklists
2. Legal requirements for plan review reports
 - a. Administrative
 - b. Judicial
3. Accepted practices, policies, and procedures of the jurisdiction
 - a. Plan review
 - b. Building and life safety components
 - c. Design, permitting and construction processes
 - d. Plans review organizations
 - e. Plans

Requisite Skills: The ability to conduct code-related research and write reports.

470-7.2.2

Facilitate the resolution of deficiencies identified during the plan review, given a submittal and the established policies 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.

- 470-A.7.2.2** The plan review process should not select or direct the design of fire protection features; it is intended to evaluate the compliance of a proposed fire protection feature for a given hazard.

Requisite Knowledge:

1. Policies and procedures of the jurisdiction regarding the communication of discrepancies
2. The appeals process
 - a. Plans review process
 - b. Plan submittal and processing
 - c. Legal proceedings
3. Codes and standards
 - a. Code references
4. Alternate design
 - a. Materials
 - b. Methods
 - c. Equivalencies
 - d. Board of appeals
 - e. Performance-based codes
 - f. Performance-based design process

Requisite Skills: The ability to communicate orally and in writing.

- 470-7.2.3** 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.

Requisite Knowledge:

1. Plan review policies and procedures of the jurisdiction
 - a. Design analysis
 - b. Abbreviations and symbols
 - c. Measurements
 - d. Plan set organization
2. Site, plot, utility and landscape plans
3. Architectural plans
4. Structural plans
5. Mechanical plans
6. Electrical plans
7. Fire protection system plans

8. Hazardous materials and processes
9. Membrane structures and tents

Requisite Skills: The ability to review applications for completeness.

470-7.2.4 Determine the applicable code or standard, given a fire protection issue, so that the proper document, edition, and section are referenced.

470-A.7.2.4 The plan examiner should enforce only those codes and standards that have been legally adopted by the jurisdiction. The plan examiner should retroactively apply codes and standards only when authorized to do so by the jurisdiction.

Requisite Knowledge:

1. Applicable codes and standards adopted by the jurisdiction
 - a. Automatic sprinkler systems
 - b. Standpipes
 - c. Fire alarm and detection systems
 - d. Automatic elevators
 - e. Fire command center
 - f. Restaurant kitchen systems
 - g. Gaseous extinguishing agents and systems
 - h. Smoke control systems
 - i. Portable fire extinguishers
2. Format of codes and standards
 - a. Code models
 - b. Code types
 - c. Code references
3. Interrelationship of codes and standards
 - a. Nationally recognized codes and standards
 - b. Jurisdiction adopted codes and amendments
 - c. State statute, rules and regulations
4. Procedures adopted by the organizations responsible for promulgating these documents
 - a. Model code groups
 - b. Nationally recognized standards
 - c. Local jurisdiction

Requisite Skills: The ability to conduct code-related research, apply codes and standards, and make decisions.

470-7.3

Plans Review

This duty involves the review and approval of plans for life and fire issues including interior finish, occupancy type, height and area limitations, construction type, and general fire safety and the identification of the requirements for fire

protection systems and permits, to ensure that the plans meet the intent of applicable codes and standards for fire and life safety, according to the following job requirements.

- 470-7.3.1** Identify the requirements for fire protection or a life safety system, given a set of plans, so that deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction.

Requisite Knowledge:

1. Applicable code requirements for life safety systems
 - a. Occupancy classification
 - b. Means of egress
 - c. Fire protection features
 - d. Building services
2. Interior finish
3. Third-party testing and evaluation

Requisite Skills: The ability to read basic floor plans or shop drawings and identify symbols used and apply codes and standards.

- 470-7.3.2** Verify the occupancy classification, given a set of plans, specifications, and a description of a building and its intended use, so that the classification is made in accordance with the applicable codes and standards and the policies of the jurisdiction.

Requisite Knowledge:

1. How to calculate occupant loads for an occupancy and for building use
2. Code requirements presented by various occupancies
3. Regulations for various occupancies
4. Operational features presented by various occupancies
5. Fire hazards presented by various occupancies

Requisite Skills: The ability to calculate occupant loads, identify occupancy factors related to various occupancy types, and use measuring tools.

- 470-7.3.3** Verify the construction type, given a set of plans, including the occupancy classification area, height, number of stories, and location, so that the building is in accordance with applicable codes and standards and deficiencies are identified, documented, and reported.

Requisite Knowledge:

1. Types of construction

2. Fire-related construction components
3. Typical building construction methods and materials
4. Code requirements related to construction types

Requisite Skills: The ability to read plans, determine construction types, and conduct code-related research.

470-7.3.4 Verify the occupant load, given a set of plans, so that the maximum allowable occupant load is in accordance with applicable codes and standards.

Requisite Knowledge:

1. How to calculate occupant loads for an occupancy and for building use
2. Code requirements presented by various occupancies
3. Regulations for various occupancies
4. Operational features presented by various occupancies
5. Fire hazards presented by various occupancies

Requisite Skills: The ability to calculate occupant loads, identify occupancy factors related to various occupancy types, and use measuring tools.

470-7.3.5 Verify that required egress is provided, given a set of plans 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.

470-A.7.3.5 This individual should be able to calculate occupant loads and determine occupant egress capabilities and systems. He or she should be able to cite multiple references from various codes and standards that reflect an understanding of the topic.

Requisite Knowledge:

1. Applicable code requirements for means of egress elements
 - a. Components
 - b. Capacity
 - c. Number
 - d. Arrangement
 - e. Travel distance
 - f. Discharge
 - g. Illumination
 - h. Emergency lighting
 - i. Marking
 - j. Special provisions

2. Occupancy egress requirements
 - a. General
 - b. Specific
3. The relationship of fixed fire protection systems to egress requirements
 - a. Fire alarm
 - b. Fire suppression
 - c. Smoke control
 - d. Elevator controls

Requisite Skills: The ability to determine egress requirements based on occupant load and research codes.

470-7.3.6 Evaluate code compliance for required fire flow and hydrant location and spacing, given a plan, codes and standards, and fire flow test results, so that hydrants are correctly located, required fire flow is determined, and deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction.

Requisite Knowledge:

1. Standard civil engineering symbols
2. Types of water supply and distribution systems
3. Water distribution system test methods
4. Characteristics of public and private water supply systems,
5. Water meters, backflow prevention and other devices that can impact on fire flow
6. The effects of friction loss and elevation on water flow
7. Potential impact of state health regulations on fire flow
8. The applicable codes and standards related to fire flow in the jurisdiction

Requisite Skills: The ability to interpret fire flow test results, determine fire hydrant locations and spacing, and read fire flow graphs.

470-7.3.7 Evaluate emergency vehicle access, given a plan, so that 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.

Requisite Knowledge:

1. Operating requirements for fire department apparatus
 - a. Minimum inside/outside radii

- b. Minimum width
 - c. Minimum vertical clearance
 - d. Weight
2. Planning and zoning requirements
3. Emergency access and accessibility requirements of applicable codes and standards
 - a. Acceptable surfaces
 - b. Specifications for dead end roads, turnarounds, cul-de-sacs and access gates
 - c. Markings

Requisite Skills: The ability to interpret and use plan scale.

- 470-7.3.8** Recommend policies and procedures for the delivery of plan review services, given management objectives, so that plan reviews are conducted in accordance with the policies of the jurisdiction and due process of the law is followed.

Requisite Knowledge:

1. Policies and procedures of the jurisdiction related to plan review
2. Sources of detailed and technical information relating to fire protection and life safety
 - a. Nationally recognized codes and standards
 - b. Professional organizations
 - c. Trade organizations

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

- 470-7.3.9** Participate in 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.

- 470-A.7.3.9** The committee intends that this requirement encompass preparation, documentation, and presentation in a formal proceeding, such as a deposition, administrative hearing, or court proceeding.

Requisite Knowledge:

1. The legal requirements pertaining to evidence rules in the legal system
 - a. Vernon's Civil Statutes
 - b. Code of Criminal Procedure
 - c. Texas Rules of Evidence
2. The types of legal proceedings

- a. Civil
- b. Criminal
- c. Administrative (e.g., Board of Appeals, sanctions, fire marshal order)
- d. Statutory

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

470-7.3.10 Evaluate plans for the installation of fire protection and life safety systems, given a plan submittal, so that the fire protection systems, including pre-engineered systems, and equipment are reviewed and deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction.

Requisite Knowledge:

1. Applicable codes and standards for fire protection systems
2. Basic physical science as it relates to fire behavior and fire suppression
3. Basic system design criteria
4. Material listing requirements
5. Material specifications
6. Installation techniques
7. Acceptance inspection/testing of completed installations
8. Construction types and techniques
9. Classification of occupancies

Requisite Skills: The ability to review specifications, read plans, classify occupancies, and apply standards.

INSTRUCTION SHEET

FIRE INSPECTOR I PERFORMANCE SKILLS

Format

Similar Fire Inspector I skills are combined into one skill sheet when possible. The skills are combined depending on whether the skill relates to Field Inspections, Administration, or Analysis and Decision Making. These skill sheets should be used in a progressive type grading format. The skill sheet is divided into individual skill objectives. The Examiner should evaluate the Fire Inspector I candidates as they complete each skill of the evaluation.

For skill sheets that do not contain time constraints, the Course Instructor should specify time constraints as necessary.

Scoring Method

The scoring method is Satisfactory (S) or Unsatisfactory (U) for each step of the skill objective, and a Pass or Fail for each individual skill section. In order to successfully pass an individual skill section, the Fire Inspector I candidate must receive satisfactory scores in all the steps of the skill objective. In order to receive an overall Pass on the skill sheet, the Fire Inspector I candidate must receive a passing score for all individual skill sections.

If a step of a skill objective is scored “Unsatisfactory”, only that skill objective must be retested. For example, if a candidate fails step b of Skill 11, he or she must be retested on Skill 11, in its entirety. Any Unsatisfactory or individual skill failure shall require the examiner to explain the reason for the failure in written form in the comments section of the skill sheet.

Preparation and Equipment

Where necessary, additional information is provided under the heading “Evaluator Information- Preparation and Equipment.” Examples are provided to assist the evaluator. Course Instructors are encouraged to use these examples to meet the minimum requirements, or they may modify the examples to meet or exceed the standard to fit their department or agency needs.

Many of the skill sheets require the use of department policies. It is suggested that the Course Instructors use the policies and procedures of his or her department. If teaching this course at a non-departmental institution, acquire a fire department’s policies and procedures, or modification thereof, to complete these skills.

For optimal learning, scenario-based training and role-playing is recommended; however, based on departmental needs certain activities may be simulated by other means. Skills demonstrated require realism, and should be conducted at various occupancies where possible.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

Skill Number 1 - Administration

Prepare inspection reports; recognize the need
for a permit, and Recognize the need for plan review

PERFORMANCE STANDARD

Section 401- 4.2.1, 4.2.2, 4.2.3

NFPA 1031 4.2.1, 4.2.2, 4.2.3

Fire Inspector I

OBJECTIVE

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. (NFPA 1031- 4.2.1)

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. (NFPA 1031- 4.2.2)

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. (NFPA 1031- 4.2.3)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given access to a single use occupancy or building, will conduct a fire inspection. During the inspection, the Inspector candidate will:

- Demonstrate the ability to use the jurisdiction's established practices and procedures
- Use the applicable fire and building codes, standards or other reference material to identify deficiencies
- Verify compliance to the codes and standards
- Document the deficiencies, need for a permit and or plan review
- Report to the skill assessor with an inspection report of deficiencies

Deficiencies reported should reflect applicable references to the adopted codes and standards.

EXAMINER NOTE:

The quality and realistic aspects of this skill set may require the examiner to provide situations that are based on past historical events from the jurisdiction.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead if applicable. Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

Instruction	Example
<p>Provide the Inspector candidate with an inspection situation verbally, in writing or through observations that are violations of the fire code. These situations could require a permit for the process or condition with an associated plan review to be conducted.</p> <p>Inspector candidate will complete a fire inspection report.</p> <p>Inspector candidate will identify verbally that a permit is needed or not needed. If needed, it must be documented on the inspection report.</p> <p>Inspector candidate will identify verbally that a plan review is required or not required. If needed, it must be documented on the inspection report.</p> <p>Provide applicable codes or standards references for all fire code deficiencies.</p>	<p><i>Using the I occupancy and noted violations, complete a fire inspection report to include:</i></p> <ol style="list-style-type: none"> 1. <i>Date of inspection</i> 2. <i>Location of property</i> 3. <i>Name and contact information of owners and managers people.</i> 4. <i>Occupancy class</i> 5. <i>Violations of the Code with code references and locations of deficiencies on the property.</i> 6. <i>Recommendations for emergency planning</i> 7. <i>Name of inspector</i> <p><i>Construction alteration of the I occupancy involves relocation of sprinkler heads and piping. Work is discovered without an approved permit or plan review in accordance with the Fire Code.</i></p> <p><i>Permit Required: 2003 International Fire Code, Section 105.1.2 & Section 105.6, Section 105.6.12</i></p> <p><i>Plan Review Required w/approval: 2003 International Fire Code, Section 901.2</i></p> <p><i>Occupant/Owner is hereby notified that a construction permit is required for installation or modification to an automatic fire extinguishing system. In accordance with the Fire Code, 2003 International Fire Code, Section 105.1.2, 105.6, 105.7.1, cease work on the automatic fire extinguishing system. Upon review and approval of submitted permit application and associated construction documents, work may resume.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 1 - Administration				
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. (401-4.2.1)				
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. (401-4.2.2)				
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. (401-4.2.3)				
The candidate:	S	U	S	U
a) Prepared inspection report				
b) Prepared a report that is clear and concise				
c) Prepared a report that is accurate				
d) Accurately reflected applicable codes and standards				
e) Recognized the need for a permit and a plan review				
f) Identified the permit type				
g) Communicated in writing				
h) Communicated why the permit and plan review was necessary and directed how to proceed with obtaining a permit and plan review				

Examiner/Candidate Comments:

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

Skill Number 2 - Administration

Investigate common complaints, Identify the applicable code or standard, Participate in legal proceedings

PERFORMANCE STANDARD

Section 401- 4.2.4, 4.2.5, 4.2.6

NFPA 1031 4.2.4, 4.2.5, 4.2.6

Fire Inspector I

OBJECTIVE

Investigate common complaints, given a reported situation or condition, so that complaint information is recorded, the AHJ-approved process is initiated, and the complaint is resolved. (NFPA 1031-4.2.4)

Identify the applicable code or standard, given a fire protection, fire prevention, or life safety issue, so that the applicable document, edition, and section are referenced. (NFPA 1031 - 4.2.5)

Participate in 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 professional. (NFPA 1031-4.2.6)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given a common complaint- a fire protection, fire prevention, or life safety issue, will demonstrate the ability to:

- Record the complaint information (according to AHJ)
- Investigate the complaint
- Identify the applicable code or standard (according to AHJ)
- Provide legal testimony in accordance with established laws, codes or standards.

EXAMINER NOTE:

Skill examiners shall ensure realism in the fire inspection process by verifying that the single use occupancy or building provides the minimum elements required for skill demonstration and evaluation. The quality and realistic aspects of this skill set may require the examiner to provide situations that are based on past historical events from the jurisdiction.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead if applicable. Additional preparation and equipment information is located below.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

Instruction	Example
<p>Provide the Inspector candidate with an inspection situation of a common complaint relative to occupancy use or occupant load.</p> <p>Provide the jurisdiction's policy or guidelines for handling complaints allowing the Inspector candidate to initiate the complaint process. Inspector Candidate shall resolve the complaint in accordance with policies, procedures or the code.</p> <p>Written documentation and verbal display of communication shall be demonstrated by the Inspector candidate.</p> <p>Inspector Candidate shall note the applicable document, edition and code section relative to the situation.</p> <p>Inspector Candidate shall use the violations in this situation and participate in a legal proceeding to present the facts of the violations in a mock legal setting.</p> <p>Inspector candidate will be directed to testify to the facts of the situation in a verbal response to the examiner. Evidence such as pictures, plans or diagrams will be presented as required for the proceeding.</p> <p>Skills examiner will act as attorney and judge in the legal process</p>	<p><i>You receive a phone call from a citizen complaining about a doctor's office that is storing gasoline in an examination room. Other examples: Smoking, odors, locked or blocked doors.</i></p> <p><i>International Fire Code, Section 104.3, Right of Entry, "...whenever the code official has reasonable cause to believe that there exists in a building or upon any premises any conditions or violations of this code which make the building or premises unsafe, dangerous or hazardous... shall have the authority to enter the building ... to inspect..." doors, crowding, obstructed egress.</i></p> <p><i>Upon inspection, it is determined that the gasoline stored is not for maintenance use and was for lawn equipment and there is 3, 5 gallon plastic gas cans. Gasoline is in the containers.</i></p> <p><i>Upon examination, you state the facts:</i></p> <ol style="list-style-type: none"> <i>1. On 1/3/07 at approximately 0945 hours,</i> <i>2. I observed three, 5 gallon gas cans in the examination room in violation of the International Fire Code, Chapter 34, Section 3404.3.4.2, #2 Quantity exceeds amount needed for demonstration, treatment, laboratory works, maintenance purposes and operation of equipment and not exceed the quantities in Table 2703.1.1</i> <i>3. I advised the occupant to remove the gas cans and the occupant refused. Due to the inherent hazard of flammable liquids stored due to the quantity did not meet the code criteria for application.</i> <i>4. I issued a citation for violation of Chapter 34 of the International Fire Code. The gas can was removed from the building and stored acceptable to the code.</i>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 2 - Administration				
Investigate common complaints, given a reported situation or condition, so that complaint information is recorded, the AHJ-approved process is initiated, and the complaint is resolved. (401-4.2.4)				
Identify the applicable code or standard, given a fire protection, fire prevention, or life safety issue, so that the applicable document, edition, and section are referenced. (401-4.2.5)				
Participate in 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 professional. (401-4.2.6)				
The candidate:	S	U	S	U
a) Received the complaint in accordance with the AHJ approved process.				
b) Recorded the complaint in accordance with policies and procedures.				
c) Initiated the AHJ approval process.				
d) Investigated the complaint.				
e) Referred or resolved the complaint in accordance with the AHJ process.				
f) Accurately identified and reflected applicable codes and standards.				
g) Communicated effectively orally and in writing.				
h) Received the complaint in accordance with the AHJ approved process.				
i. Correlated specific document language to the given issue				
j. Testified to facts				
k. Presented facts accurately				
l. Exhibited professional demeanor (speech, dress, manner, body language)				
m. Listened, communicated and differentiated facts from opinions				

Examiner/Candidate Comments:

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

Skill Number 3 - Field Inspection

Identify the occupancy classification; Compute the allowable occupant load,
Inspect means of egress elements, and
Verify the type of construction

PERFORMANCE STANDARD

Section 401- 4.3.1, 4.3.2, 4.3.3, 4.3.4

NFPA 1031 4.3.1, 4.3.2, 4.3.3, 4.3.4

Fire Inspector I

OBJECTIVE

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. (NFPA 1031-4.3.1)

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. (NFPA 1031-4.3.2)

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. (NFPA 1031-4.3.3)

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. (NFPA 1031-4.3.4)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate shall:

- Identify the occupancy classification of a single-use occupancy, given a description of the occupancy and its use
- Evaluate to code requirements and use calculations to determine occupant load
- Inspect means of egress elements, given observations made during a field inspection of an existing building
- 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

EXAMINER NOTE:

Skills examiners shall ensure realism in the skills evaluation to a basic level of understanding and skills demonstration for evaluation and calculations. The common complaint should be a basic level complaint involving associated elements to occupancy class and occupancy load elements.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer and official letterhead if applicable. Additional preparation and equipment information is located with the specific performance skill.

Instruction	Example
<p>Provide inspector candidate with a description and a picture or observation of a single-use occupancy.</p> <p>Include a detailed description or floor plan or sketch with dimensions reflected for the single use occupancy.</p> <p>Have the inspector candidate evaluate the description and or picture (or through observation at a Business, Group B location), and compare to code requirements for occupancy group or class definition with accuracy.</p> <p>Provide the occupant load factor from the code to the candidate and the candidate will compute the occupant load of the occupancy from the square footage in consideration of the maximum floor area allowances per occupant.</p> <p>Through observation of the single use occupancy or building, verify that means of egress elements are maintained in compliance with the codes or standards.</p> <p>The Inspector candidate will use a plan or field sketch to identify and document any means of egress violation, in accordance with the policies of the jurisdiction.</p> <p>Through observation of the single use occupancy or building, identify the type of construction in an alteration or remodel and compare to existing construction type of the occupancy or building.</p>	<p><i>Occupancy is a one-story type V structure, undergoing remodel to add a patient treatment room. It has offices and examination rooms and the occupant is a general practitioner doctor with a staff of 4 people. General office equipment, files and combustible material is present. There are small quantities of medical supplies, medicine, and an oxygen cylinder.</i></p> <p><i>Floor plan of 3,237 square feet, professional office building or area, group B occupancy.</i></p> <p><i>International Fire Code, Section 202, Definitions, Business Group B, includes, among others, the use of a building or structure or a portion thereof for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but are not limited to; Professional services (architect, attorney, dentist, physician)</i></p> <p><i>Square Footage Allowances Per Occupant = 100 gross (Table 1003.2.2.2, International Fire Code)</i> $3,237/100 = 32.37$ <i>Occupant Load = 32</i></p> <p><i>Verify exit doors function with applicable door hardware. Verify exit lights and emergency illumination function.</i></p> <p><i>Entrance, main exit door does not swing in direction of egress based on occupant load.</i></p> <p><i>Type V, wood stick construction</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	S	U	S	U
Skill Number 3 - Field Inspection				
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. (401-4.3.1)				
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. (401-4.3.2)				
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. (401-4.3.3)				
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. (401-4.3.4)				
The candidate:	S	U	S	U
a) Accurately identified the occupancy group/classification				
b) Identified occupancy factors related to various occupancy types				
c) Utilized applicable codes and standards				
d) Verified the description, and observations meet the applicable code				
e) Accurately calculated the occupant load				
f) Measured or confirmed square footage via documentation.				
g) Observed and recognized problems with exit access, exits and exit discharge				
h) Calculated occupant load and verified exit width and number of exits were acceptable.				
i) Verbally described maintenance requirements of egress elements.				
j) Made basic decisions related to means of egress deficiencies				
k) Used measuring tools to verify widths and limits of exits				

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
 Performance Standards

l) Made field sketches to document means of egress paths as necessary				
m) Verified type of construction				
n) Demonstrated the ability to read plans				
o) Classified type of construction of addition or remodeling project				
p) Recorded construction type in accordance with polices of the jurisdiction				
q) Confirmed it meets code classifications for construction for the original intent and does not endanger firefighters				

Examiner/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

<hr/>	<hr/>	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
<hr/>	<hr/>	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

Skill Number 4 - Field Inspection

Determine the operational readiness of existing fixed fire suppression systems, fire detection alarm systems, and portable fire extinguishers;
Compare an approved plan to an existing fire protection system

PERFORMANCE STANDARD

Section 401- 4.3.5, 4.3.6, 4.3.7, 4.3.9

NFPA 1031 4.3.5, 4.3.6, 4.3.7, 4.3.9

Fire Inspector I

OBJECTIVE

Determine the operational readiness of existing fixed fire suppression 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. (401-4.3.5)

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. (401-4.3.6)

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. (401-4.3.7)

Compare an approved plan to an existing 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. (401-4.3.9)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate shall:

- Verify the operational readiness of fire protection systems and fire extinguishers.
- Verify an approved plan to existing conditions through application of a plan comparison inspection.

EXAMINER NOTE:

Skills examiners shall ensure realism in the skills evaluation to a basic level of understanding and skills demonstration for evaluation and calculations. The common complaint should be a basic level complaint involving associated elements to occupancy class and occupancy load elements.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead if applicable. Additional preparation and equipment information is located below.

FIRE INSPECTOR I

FIELD INSPECTION SKILL
PAGE 1

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TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

Instruction	Example
<p>Provide an inspection situation that has a fire protection system, either a fixed system kitchen type extinguishing system or a sprinkler system that interfaces to a fire alarm system. Include an approved plan of the system/s.</p> <p>Through observation of an installed fixed fire suppression system, Inspector candidate will: Verify the system is operational.</p> <p>Verify water supply or agent is available.</p> <p>Verify that valves are open or gauges indicate proper pressure as applicable.</p> <p>Use test and maintenance documentation to verify current operational status.</p> <p>Verify that valves are open and secured.</p> <p>Verify control panels are on with no trouble indications.</p> <p>Verify Documentation of maintenance that would include inspection tags and records of alarm system and device tests, sprinkler or standpipe main drain tests, and so forth.</p> <p>Verify through comparison of the plan to field observations of the system installation, identify modifications to the system if any. Document and report deficiencies.</p>	<p><i>Using the mercantile occupancy inspect the wet fire sprinkler system to ensure readiness.</i></p> <ol style="list-style-type: none"> <i>a. Sprinkler control valves are open and sealed or equipped with tamper switches.</i> <i>b. Alarm line shut off cock is open.</i> <i>c. Pressure gauges are functioning</i> <i>d. Water pressure gauge reading on the system side is equal to or greater than the gauge reading on the service side.</i> <i>e. Alarm test valve is closed.</i> <i>f. All drains are closed.</i> <i>g. No water leaks.</i> <i>h. Sprinkler cabinet contains appropriate replacement sprinklers and wrench.</i> <i>i. Test and maintenance records.</i> <i>j. Check system control unit.</i> <i>k. Check primary power supply</i> <i>l. Checks secondary power supply</i> <i>m. Check trouble signal power supply</i> <i>n. Check initiating devices</i> <ol style="list-style-type: none"> <i>a. Check alarm-indicating device.</i> <i>b. Check other services-such as-shut down heating, close fire doors, etc...?</i> <i>c. Check emergency voice/alarm communications systems</i> <i>o. Check type of signaling system</i>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

Instruction	Example
<p>Provide an occupancy that is equipped with fire extinguishers.</p> <p>Through observation and test documentation of existing portable fire extinguishers, the Inspector candidate will:</p> <p>Verify operational readiness.</p> <p>Use test and maintenance documentation to verify maintenance status.</p> <p>Verify fire extinguishers or systems sealed with proper gauge readings.</p> <p>Document and report deficiencies.</p>	<p><i>Using the library occupancy, inspect the portable fire extinguishers to ensure readiness.</i></p> <ul style="list-style-type: none"> <i>a. Hazard protected</i> <i>b. Classification of extinguisher</i> <i>c. If available, installed & maintained to code</i> <i>d. Appearance (no dents, missing parts, corrosion, clean)</i> <i>e. Nozzle or hose secure</i> <i>f. Extinguisher matches hazard.</i> <i>g. Label is present and readable.</i> <i>h. Charge is present.</i> <i>i. Seal intact.</i> <i>j. State Fire Marshal's Tag (as applicable)</i> <i>k. Hydrotest date.</i> <i>l. Access to extinguisher</i> <i>m. Required locations (occupancy and hazard, within 30' of commercial cooking, flammable/combustible liquid, during construction, special hazards)</i> <p><i>Test and maintenance records</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	S	U	S	U
Skill Number 4 - Field Inspection				
Determine the operational readiness of existing fixed fire suppression 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. (401-4.3.5)				
4.3.6 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. (401-4.3.6)				
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. (401-4.3.7)				
Compare an approved plan to an existing 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. (401-4.3.9)				
The candidate:	S	U	S	U
a) Through observation, determined operational readiness of existing fixed suppression system				
b) Used test documentation to determine operational				

TEXAS COMMISSION ON FIRE PROTECTION
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readiness				
d) Verified documentation of maintenance and testing				
e) Identified, documented and reported deficiencies in accordance with policies of the jurisdiction				
f) Through observation, determined operational readiness of existing fixed suppression system				
g) Through observation, determined operational readiness of existing fire detection and alarm systems				
h) Used test documentation to determine operational readiness				
i) Verified documentation of maintenance and testing				
j) Identified, documented and reported deficiencies in accordance with policies of the jurisdiction				
k) Through observation, determined operational readiness of existing fire detection and alarm systems				
l) Through observation, determined operational readiness of existing portable fire extinguishers				
m) Used test documentation to determine operational readiness				
n) Verified documentation of maintenance				
o) Identified, documented and reported deficiencies in accordance with policies of the jurisdiction				
p) Through observation, compared the approved plan to the actual field installation				
q) Identified modifications or changes to the system				

Examiner/Candidate Comments:

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

Certifying Examiner	Date	Overall Skill Sheet Score
		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Re-Test Certifying Examiner	Date	Overall Skill Sheet Re-Test Score
		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
 Performance Standards

Skills examiners shall ensure realism in the skills evaluation to a basic level of understanding and skills demonstration for evaluation and calculations.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead if applicable. The skills examiner will set the stage for an inspection skill to be demonstrated as the instructions identify below. Additional preparation and equipment information is located below.

Instruction	Example
<p>Provide an inspection situation involving a single use occupancy (S, M, R1, R2, A2 or I occupancy class) for inspection that contains equipment, processes or operations that are hazardous.</p> <p>The occupancy inspection situation should contain incidental (small quantities) storage, handling and use of flammable and combustible liquids or gases or hazardous materials for maintenance purposes.</p> <p>The inspection situation must have a fire protection issue that requires validation of compliance through the codes and standards and all violations are to be documented on an inspection report in accordance with the policies and procedures of the jurisdiction.</p>	<p><i>Using the M occupancy, the forklift battery charging area exhibits acid spill around the charging area.</i></p> <p><i>Using the identified equipment, process or operation of the M occupancy, identify hazardous conditions from observations of the equipment, processes or operations. (Examples: accumulations of trash or debris, cleaning process involves flammable liquid that is not acceptable for use in the M occupancy, forklift battery charging area is not vented in an approved manner.</i></p> <p><i>Provide a fire extinguisher in the hazard area of the battery charging area.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
Skill Number 5 - Field Inspection	S	U	S	U
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. (401-4.3.8)				
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. (401-4.3.12)				
Verify code compliance for incidental storage, handling, and use of hazardous materials, 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. (401-4.3.13)				
Determine code compliance, given the codes, standards, and policies of the jurisdiction and a fire protection issue, so that the applicable codes, standards, and policies are identified and compliance determined. (401-4.3.15)				
The candidate:	S	U	S	U
a. Recognized hazardous conditions				
b. Verified that equipment, processes or operations were conducted and maintained in accordance with applicable codes				
c. Verified code compliance for equipment, processes or operations				
d. Identified, documented and reported deficiencies in accordance with policies of the jurisdiction				
e. Used codes, standards and guidelines to determine compliance				
f. Used observations to determine code compliance				
g. Verified code compliance for incidental storage, handling and				

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Fire Inspector I
 Performance Standards

use of flammable and combustible liquids or gases or hazardous materials				
h. Referenced the proper document containing code/standard				
i. Referenced the correct section of the applicable code or standard				

Examiner/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

Skill Number 6 - Field Inspection
Recognize a hazardous fire growth potential

PERFORMANCE STANDARD

Section 401- 4.3.14

NFPA 1031 4.3.14

Fire Inspector I

OBJECTIVE

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. (NFPA 1031-4.3.14)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate shall:

- Recognize a hazardous fire growth potential in a building or space, given field observations

EXAMINER NOTE:

Skills examiners shall ensure realism in the skills evaluation to a basic level of understanding and skills demonstration for evaluation and calculations.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead if applicable. Additional preparation and equipment information is located below.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
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Instruction	Example
<p>Provide a single use occupancy (S, M, R1, R2, A2 or I occupancy class) for inspection.</p> <p>The fire code requirements for furnishings, decorative vegetation, decorations and trim, interior finish and decorative materials will be evaluated.</p> <p>Identify any item or conditions that would create dangerous fire growth potential.</p> <p>Identify features in the code that are there to keep fire growth potential to an absolute minimum.</p>	<p><i>Using the I occupancy, the Inspector candidate should identify the characteristics that contribute to fire spread. (examples: common combustibles, flammable/combustible liquids, energized electrical equipment, combustible metals, building construction, heat sources, contents)</i></p> <p><i>Compare the elements with the I occupancy to the fire code requirements. (examples: mattress requirements, furnishing flammability requirements)</i></p> <p><i>Identify specific elements within the I occupancy that would contribute to flame spread, high heat release rates and smoke generation. examples: oxygen use, bedding, wall coverings)</i></p> <p><i>Recommend features to reduce fire growth potential (i.e., sprinklers, fire walls, fire detection).</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	S	U	S	U
Skill Number 6 - Field Inspection				
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. (401-4.3.14)				
The candidate:	S	U	S	U
a. Recognized hazardous fire growth potential				
b. Identified hazardous conditions				
c. Identified remedies for the hazardous conditions				
d. Identified, documented and reported deficiencies in accordance with policies of the jurisdiction				

Examiner/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

Skill Number 7 - Field Inspection
Verify emergency planning and preparedness,
Inspect emergency access, and Verify fire flows

PERFORMANCE STANDARD

Section 401- 4.3.10, 4.3.11, 4.3.16

NFPA 1031 4.3.10, 4.3.11, 4.3.16

Fire Inspector I

OBJECTIVE

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. (NFPA 1031-4.3.10)

Inspect emergency access for an existing 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. (NFPA 1031-4.3.11)

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. (NFPA 1031-4.3.16)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate shall:

- 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
- Inspect emergency access for an existing site, given field observations
- Verify fire flows for a site, given fire flow test results and water supply data

EXAMINER NOTE:

Skills examiners shall ensure realism in the skills evaluation to a basic level of understanding and skills demonstration for evaluation and calculations.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead if applicable. Additional preparation and equipment information is located below.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

Instruction	Example
<p>Provide an inspection situation and an emergency plan and a description of any one of the following type occupancies. R1, R4, A2, E or I.</p> <p>Provide the inspector candidate with fire inspection history, documents, drawings, plans or other information to prepare the Inspector for the inspection.</p> <p>Provide any policies or procedures for the jurisdiction.</p> <p>Provide necessary equipment to conduct the fire inspection.</p> <p>The inspector candidate must conduct an inspection and verify the following information:</p> <p>Establish an inspection appointment time with the building owner or occupant representative</p> <p>Conduct a fire inspection.</p> <p>Verify that emergency planning is in accordance with applicable codes and standards.</p> <p>Verify that emergency exercises have been conducted in accordance with applicable codes and standards.</p> <p>Conduct an inspection exit interview.</p>	<p><i>Using the I occupancy, the Inspector candidate should identify the elements of the fire evacuation plan or fire safety plan in accordance with the fire code.</i></p> <p><i>International Fire Code, Section 404.3.1 Fire Evacuation Plans.(example: egress or escape routes, procedures for employees, accountability, assignment of personnel, etc)</i></p> <p><i>Evacuation drill document reflects exercise conducted on 1/3/07 and evacuation time was 4 minutes 36 seconds, accountability was verified within 8 minutes.</i></p> <p><i>Use past inspection records that reflect outstanding violations and identify any permits currently in place. Building or Occupant data that includes contact information and building construction information. Floor Plans, sketches or permit plans to reflect processes and means of egress.</i></p> <p><i>Inspection time should consider business impact in relation to occupancy use. Schedule inspection time based on past time conducting the inspection and provide ample time to conduct a thorough fire inspection.</i></p> <p><i>Policy on fire inspection steps for enforcement action. Procedure for inspection follow up time frame. Procedure for enforcement action for no compliance for uniform enforcement.</i></p> <p><i>Codes, tape measure, flashlight, applicable personal protective equipment. Checklist if applicable, forms, writing tools, clipboard or other means such as mobile inspection record keeping system,(i.e, PDA or lap top computer).</i></p> <p><i>The single use occupancy will be inspected for emergency preparedness, emergency access, fire hazards, fire protection system readiness, special hazards and building service equipment to ensure conformance to the adopted codes</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
Performance Standards

	<p><i>and standards</i></p> <p><i>Documented code violations identify location and violation reference. Documentation should reflect what needs to be done. Such as stop, remove, repair, install, or provide.</i></p>
--	--

Instruction	Example
<p>Inspector candidate will conduct a fire flow test using appropriate pitot tube and gauges, calculate and graph fire flow results. <i>(Take appropriate precautions to avoid water damage or business interruption if possible)</i> Or given fire flow data, graph the data into results</p>	<p><i>Using the M occupancy at 1234 First Street (Type VA construction, 20,000 square feet), conduct a fire flow test.</i></p> <p><i>Complete a fire flow graph and confirm available water supply down to 20 psi and identify the GPM available.</i></p>
<p>Using the previous fire flow data or other fire flow test data provided, Inspector candidate will review the test results from the test information and water supply data.</p>	<p><i>Compare GPM flow to codes or standards to confirm compliance based on square footage and construction type. (Ref. International Fire Code Appendix as applicable)</i></p>
<p>Compare the fire flow results to the applicable codes or standards.</p>	<p><i>Available water supply on 1/3/07 @ 2:00 pm is 1405 GPM at 20 psi. Code requires 2500 GPM</i></p>
<p>Inspector candidate will record deficiencies on appropriate forms.</p>	<p><i>Fire flow does not comply with the fire code.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
Skill Number 7 - Field Inspection	S	U	S	U
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. (401-4.3.10)				
Inspect emergency access for an existing 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. (401-4.3.11)				
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. (401-4.3.16)				
The candidate:	S	U	S	U
a. Verified that emergency planning and preparedness measures were in place				
b. Reviewed written plan as it applies to codes and standards				
c. Used field observations of the written records to confirm emergency exercises are practiced				
d. Identified, documented and reported deficiencies in accordance with policies of the jurisdiction				
e. Identified the emergency access requirements				
f. Used measuring tools to verify maintenance of widths,				

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector I
 Performance Standards

heights and turning radii of fire apparatus access				
g. Observed, identified and documented all deficiencies according to codes, standards or policies				
h. Reported decisions to ensure maintenance is in accordance with local policies.				
i. Conducted a fire flow test using pitot tube and gauges				
j. Identified the available fire flow from the test results that were calculated and graphed				
k. Referenced the correct section of the applicable code or standard				
l. Identified, documented and reported deficiencies				

Examiner/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

<hr/>	<hr/>	Overall Skill Sheet Score Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Certifying Examiner	Date	
<hr/>	<hr/>	Overall Skill Sheet Re-Test Score Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Re-Test Certifying Examiner	Date	

TEXAS COMMISSION ON FIRE PROTECTION

BASIC STRUCTURE FIRE SUPPRESSION

Performance Standards

SKILL #8 - GENERAL

Collecting Hazard Information

PERFORMANCE STANDARD

Section 401-4.1

NFPA 472 4.2.3

Fire Inspector I

OBJECTIVE

Given the identity of various hazardous materials/WMD (name, UN/NA identification number, or type placard), awareness level personnel shall identify the fire, explosion, and health hazard information for each material by using the current edition of the DOT *Emergency Response Guidebook* and shall meet the following requirements:

- (1) Identify the three methods for determining the guidebook page for a hazardous material/WMD.
- (2) Identify the two general types of hazards found on each guidebook page.

INSTRUCTIONS - procedures for achieving the objective

I will provide you with the most current edition of the DOT Emergency Response Guidebook. I will give you a scenario involving an identified hazardous material. The hazardous material will be identified by one of the following: the name of the hazardous material, the identification number of the hazardous material, or by showing you a type of placard. You will verbalize to me the necessary response information for the given scenario. The name of the hazardous material or identification number will be listed in the current edition of the DOT Emergency Response Guidebook. You will begin on my instruction. The skill will end when you state to me that you have completed all of the identified steps. You will have four minutes to complete this skill. Do you understand these instructions?

EXAMINERS NOTE

The firefighter examinee will not be allowed to review the performance steps at the time of testing. The examiner will choose **two** of the **three** choices on the skills sheet for the examinee to verbally identify.

PREPARATION & EQUIPMENT

DOT Emergency Response Guidebook

Various placards

A scenario involving identified hazardous materials

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TEXAS COMMISSION ON FIRE PROTECTION
BASIC STRUCTURE FIRE SUPPRESSION
 Performance Standards

SKILL #8
GENERAL

DOT Emergency Response Guidebook

Trainee: _____

Notes: _____

Date: _____

School: _____

Test Site: _____

SKILL #8 - GENERAL		<u>TEST</u>	
		PASS	FAIL
The firefighter examinee will:			
1) * use the correct guide number			
2) <u>verbally</u> identify the proper emergency action for the type of incident (fire, spill or leak, and first aid) for the given hazardous material; <u>AND / OR</u> <u>verbally</u> identify the proper protective equipment necessary for the given hazardous material; <u>AND / OR</u> <u>verbally</u> identify the initial isolation and protective action distance for the identified hazardous material	_____ 1 _____ _____ 1 _____ _____ 1 _____		
3) provide complete response information based on given scenario	_____ 1 _____		
4) complete in 4 minutes or less (stop examinee after 8 minutes if not completed)	_____ 1 _____		
TOTAL			

Allotted Time for this skill: 4 minutes

Total points possible: 4; Total points needed to pass: 3

NOTE: * Absolute; unsatisfactory completion of this step requires retesting of the entire skill.

TEXAS COMMISSION ON FIRE PROTECTION
BASIC STRUCTURE FIRE SUPPRESSION
Performance Standards

Examiner/Candidate Comments:

**All steps of the skill objective are mandatory and must be scored as
“Satisfactory” to pass the skill.**

<hr/> Certifying Examiner	<hr/> Date	Overall Skill Sheet Score
		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
<hr/> Re-Test Certifying Examiner	<hr/> Date	Overall Skill Sheet Re-Test Score
		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

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INSTRUCTION SHEET

FIRE INSPECTOR II PERFORMANCE SKILLS

Format

Similar Fire Inspector II skills are combined into one skill sheet when possible. The skills are combined depending on whether the skill relates to Field Inspections, Administration, or Analysis and Decision Making. These skill sheets should be used in a progressive type grading format. The skill sheet is divided into individual skill objectives. The Examiner should evaluate the Fire Inspector II candidates as they complete each skill of the evaluation.

For skill sheets that do not contain time constraints, the Course Instructor should specify time constraints as necessary.

Scoring Method

The scoring method is Satisfactory (S) or Unsatisfactory (U) for each step of the skill objective, and a Pass or Fail for each individual skill section. In order to successfully pass an individual skill section, the Fire Inspector II candidate must receive satisfactory scores in all the steps of the skill objective. In order to receive an overall Pass on the skill sheet, the Fire Inspector II candidate must receive a passing score for all individual skill sections.

If a step of a skill objective is scored “Unsatisfactory”, only that skill objective must be retested. For example, if a candidate fails step b of Skill 11, he or she must be retested on Skill 11, in its entirety. Any Unsatisfactory or individual skill failure shall require the examiner to explain the reason for the failure in written form in the comments section of the skill sheet.

Preparation and Equipment

Where necessary, additional information is provided under the heading “Evaluator Information- Preparation and Equipment.” Examples are provided to assist the evaluator. Course Instructors are encouraged to use these examples to meet the minimum requirements, or they may modify the examples to meet or exceed the standard to fit their department or agency needs.

Many of the skill sheets require the use of department policies. It is suggested that the Course Instructors use the policies and procedures of his or her department. If teaching this course at a non-departmental institution, acquire a fire department’s policies and procedures, or modification thereof, to complete these skills.

For optimal learning, scenario-based training and role-playing is recommended; however, based on departmental needs certain activities may be simulated by other means. Skills demonstrated require realism, and should be conducted at various occupancies where possible.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 1- Administration

Process Permit Application and a Plan Review Application,
Investigate Complex Complaints, and Recommend Modifications

PERFORMANCE STANDARD

Section 402-5.2.1, 5.2.2, 5.2.3, 5.2.4

NFPA 1031 5.2.1, 5.2.2, 5.2.3, 5.2.4

Fire Inspector II

OBJECTIVE

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. (NFPA 1031-5.2.1)

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. (NFPA 1031-5.2.2)

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. (NFPA 1031-5.2.3)

Recommend modifications to codes and standards of the jurisdiction, given a fire safety issue, so that the proposed codes and standards are correctly written and address the problem, need, or deficiency.
(NFPA 1031-5.2.4)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given specific requests, shall:

- Process a permit application and a plan review application
- Investigate complex complaints, given a reported situation or condition
- Recommend modifications to codes and standards given a fire safety issue

EXAMINER NOTE:

The skills demonstrated require realism and should be based on actual incidents and specific requests.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead if applicable. Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 1 Evaluator Information-Preparation and Equipment

Instruction	Example
<p>Provide a permit application and site or floor plan with use information specific to a permit request for review and approval.</p> <p>Have the Inspector candidate verify the permit application is properly completed.</p> <p>Have the Inspector candidate verify the permit application information and site or floor plan complies with codes and standards.</p> <p>Have the Inspector candidate document approval or disapproval of the permit request or plan. Inspector candidate will communicate verbally and in writing, to the applicant, the approval or denial of the permit request.</p> <p>Have the Inspector document and report deficiencies according to policies and procedures of the jurisdiction</p>	<p><i>ABC Furniture Outlet requests a tent permit for temporary use of a 50 X 50 tent for a going out of business sale. The aisles and site plan must comply with code.</i></p> <p><i>Inadequate information provided, no acceptable documentation that indicates that the tent's fabric is flame retardant accompanies the request.</i></p> <p><i>Site plan reflects tent location is too close to property line. 15 feet is reflected, minimum required is 20 feet. International Fire Code Section 2403.2</i></p> <p><i>Permit Request: ABC Furniture Outlet. "NOT APPROVED", insufficient information provided to confirm compliance to the code. Provide the following information: Acceptable certificate of flame retardant treatment or fabric. International Fire Code Section 2406.1 –2406.3</i></p> <p><i>Permit Application – Received 1/3/07, disapproved on 1/3/07 for failing to submit acceptable documentation of flame resistance. International Fire Code Section 2406.1-2406.3</i></p>

Instruction	Example
<p>The evaluator will provide the Inspector candidate with a complex complaint (one that may have multiple solutions) within the multi-use building or occupancy.</p> <p>Have the Inspector candidate apply the codes and applicable standards to the identified problem.</p> <p>Resolve the complaint in accordance with local policies or procedures.</p>	<p><i>People are smoking in the entranceway of the warehouse.</i></p> <p><i>International Fire Code, Section 310</i></p> <p><i>Smoking issue was a health issue due to second hand smoke and issue was referred back to the warehouse management.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Instruction	Example
<p>Provide a fire safety issue within the jurisdiction that may require modifications to the codes and standards to improve community fire service or protection.</p> <p>Have the Inspector candidate identify solutions to the issue.</p> <p>Have the Inspector candidate write a local code amendment that modifies the language of the fire code to address the fire safety issue.</p> <p>Have the Inspector candidate communicate with written cost risk benefits to the modifications. Provide supporting information as needed to help realistically quantify the cost risk benefits.</p>	<p><i>Due to a large number of residential fire fatalities and historical losses, it is proposed that a mandatory residential sprinkler requirement be instituted by amendment to the local fire code.</i></p> <p><i>1) All new residential occupancies require sprinkler protection</i> <i>2) All existing residential occupancies require sprinkler protection within 10 years.</i></p> <p><i>International Fire Code, Section 903.2 Where Required.</i></p> <p><i>ADD Section 903.2.16</i> <i>Group R3 Occupancies</i> <i>An automatic sprinkler system shall be provided within all new R3 occupancies in accordance with NFPA 13R.</i></p> <p><i>Historical Losses – 5 years, 22.5 million dollars and 10 fatalities and only 5% of the buildings were rebuilt. Analysis reflects reduction to 6 residential fire deaths, 10 million dollars loss reduction and 70% of the buildings would be rebuilt.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 1- Administration				
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. (402-5.2.1)				
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. (402-5.2.2)				
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. (402-5.2.3)				
Recommend modifications to codes and standards of the jurisdiction, given a fire safety issue, so that the proposed codes and standards are correctly written and address the problem, need, or deficiency.(402-5.2.4)				
The candidate:	S	U	S	U
a) Evaluated the application for proper completion				
b) Determined application compliance to codes, standards and policies				
c) Documented approval or denial				
d) Communicated verbally and in writing the permit approval or denial				
e) Documented and reported deficiencies according to policies and procedures of the jurisdiction				
e) Evaluated the plan review application for proper completion				

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

f) Determined application compliance to codes, standards and policies				
g) Documented approval or denial of the plan review application				
h) Communicated verbally and in writing any deficiencies in the plan review application				
i) Identified the problem				
j) Documented the complaint in writing				
k) Accurately interpreted applicable codes and standards				
l) Referred or resolved complaint in accordance with local policies				
m) Identified need for modification to the current code or standard				
n) Identified solutions to the issue				
o) Communicated verbally and in writing the recommended modifications				
p) Communicated verbally and in writing the potential cost risk benefits of the modifications				

Examiner/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 2 - Administration
Recommend policies and procedures

PERFORMANCE STANDARD

Section 402-5.2.5

NFPA 1031 5.2.5

Fire Inspector II

OBJECTIVE:

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. (NFPA 1031-5.2.5)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given management objectives, shall:

- Recommend policies and procedures for the delivery of inspection services
- So that inspections are conducted in accordance with the policies of the jurisdiction and due process of the law is followed.

EXAMINER NOTE:

The skills demonstrated require realism and should be based on actual incidents and specific requests.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead if applicable. Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 2 Evaluator Information-Preparation and Equipment

Instruction	Example
<p>Provide a management objective for delivery of fire inspection services.</p> <p>Have the Inspector candidate review the management objective and recognize problems with the objective.</p> <p>Have the Inspector candidate identify solutions to the problem and verbally recommend a policy or procedure to improve inspection services.</p> <p>Document the policy or procedure to resolve conflicts.</p>	<p><i>Management Objective: Reduce our follow up inspection frequency from 10 days to 5 days.</i></p> <p><i>Our current follow up frequency is 10 days and reducing it to 5 will impact our inspection activities to reduce the number of initial inspections per week.</i></p> <p><i>Recommend we continue our follow up inspection frequency at 10 days and initiate a voluntary owner/occupant web based notification process to request re-inspections prior to the 10 days. This would continue our present inspection rate and provide the citizens input into when they are ready for re-inspection.</i></p> <p><i>Policy: Follow up inspections will be completed within 10 days. Citizens have the ability to access our web based "request an inspection" form. Web based requests will be followed up within 5 business days.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION

Fire Inspector II

Performance Standards

Skill Number 3 - Field Inspection

Compute occupant load, occupancy classifications,
and Analyze egress

PERFORMANCE STANDARD

Section 402- 5.3.1, 5.3.2, 5.3.5

NFPA 1031 5.3.1, 5.3.2, 5.3.5

Fire Inspector II

OBJECTIVE

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 applicable codes and standards. (NFPA 1031-5.3.1)

Identify the occupancy classifications of a mixed-use building, given a description of the uses, so that each area is classified in accordance with applicable codes and standards. (NFPA 1031-5.3.2)

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. (NFPA 1031-5.3.5)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given access to a mixed (multi-use) use occupancy or building will conduct a fire inspection. During the inspection, the Inspector Candidate will:

- Compute the maximum allowable occupant load, given field observations or a description of its uses
- Identify the occupancy classifications, given a description of the uses
- Analyze the egress elements of the building or portion of the building, given observations made during the inspection

EXAMINER NOTE:

Skill examiners shall ensure realism in the fire inspection process by verifying that the mixed occupancy or building provides the minimum elements required for skill demonstration and evaluation.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, forms, paper, applicable codes and standards, local practices and procedures, or a computer records management system with mobile inspection capturing ability. Provide applicable data or records containing information about the occupant or building to reflect past inspection, permits or other elements to support the preparation for inspection. Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

General Evaluator Information-Preparation and Equipment

Instruction	Example
<p>Provide an inspection situation using a mixed/multi-use occupancy or building so the inspector candidate can calculate the occupancy load during an inspection.</p> <p>Provide fire inspection history, documents, drawings, plans or other information to prepare the Inspector candidate for the inspection.</p> <p>Provide any policies or procedures for the jurisdiction.</p> <p>Provide necessary equipment to conduct the fire inspection.</p> <p>Establish an inspection appointment time with the building owner or occupant representative.</p> <p>Inspector candidate will compute the maximum allowable occupant load for the use area in accordance with codes and standards. Provide or verify the availability of a calculator</p> <p>Using the multi-use occupancy or building, or portion thereof, Inspector candidate through observations will confirm that exit access, exits and exit discharge requirements are provided and located in accordance with applicable codes and standards.</p> <p>Conduct a fire inspection.</p> <p>Inspector Candidate will identify and document the location and types of violations and report the violations in accordance with the policies of the jurisdiction.</p> <p>Conduct an inspection exit interview.</p>	<p><i>Use a mixed occupancy possibly City Hall, civic centers with assembly occupancies, libraries, police stations, fire stations, storage facilities, mercantile occupancies such as auto parts sales and repair facilities.</i></p> <p><i>Using a tape measure, verify the square footage in the fire station with the following areas calculated as mixed use. Apparatus Bays are storage, Classroom is business and the sleeping quarters is residential. Using the code references and square footage factors from the applicable codes, calculate the occupant load.</i></p> <p><i>Use past inspection records that reflect outstanding violations and identify any permits currently in place. Building or Occupant data that includes contact information and building construction information. Floor Plans or permit plans to reflect hazardous processes such as high-piled storage racks</i></p> <p><i>Inspection time should consider business impact in relation to occupancy use. Schedule inspection time based on past time spent conducting the inspection and to provide ample time to conduct a thorough fire inspection.</i></p> <p><i>Using existing occupancy load data, verify the occupant load is within code requirements.</i></p> <p><i>Codes, tape measure, flash light, applicable personal protective equipment. Checklists if applicable. Forms, writing tools, clipboard or other means such as mobile inspection record keeping system (PDA or lap top computer.)</i></p> <p><i>The mixed-use occupancy will be</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

	<p><i>inspected for emergency preparedness, emergency access, fire hazards, fire protection system readiness, special hazards and building service to ensure conformance to the adopted codes and standards.</i></p> <p><i>Verify the width of corridors or aisles is per the applicable codes and standards.</i></p> <p><i>Verify the exit width is in accordance with the applicable codes and standards.</i></p> <p><i>Using observations to confirm the number of exits required, are in place and properly located.</i></p> <p><i>Verify the exit access, exit and exit discharge is free and unobstructed by opening and using the egress path.</i></p> <p><i>Verify the exit signs comply with the code for location, graphics, illumination, power source.</i></p> <p><i>Verify the means of egress illumination is functional during the day or night as applicable to the occupancy.</i></p> <p><i>Verify travel distance is in accordance with codes.</i></p> <p><i>Confirm the accessible means of egress or areas of rescue assistance are in accordance with the code as applicable to the occupancy.</i></p> <p><i>Document code violations, identify location and violation reference. Documentation should reflect what needs to be done. Such as "remove, repair, install, provide". Recommendations to include emergency preparedness adjustments or alternatives to achieving code compliance are included.</i></p>
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TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 3 - Field Inspection				
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 applicable codes and standards. (402-5.3.1)				
Identify the occupancy classifications of a mixed-use building, given a description of the uses, so that each area is classified in accordance with applicable codes and standards. (402-5.3.2)				
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. (402-5.3.5)				
The candidate:	S	U	S	U
a) Verified occupancy use				
b) Used applicable codes and standards to establish occupant load factor				
c) Used measuring tools and read plans				
d) Calculated the maximum allowable occupant load accurately				
e) Recognized building uses and occupancy classifications				
f) Interpreted the code requirements for the actual use of occupancy classifications				
h) Identified egress components (exit access, exit & exit discharge requirements) in the mixed-use occupancies				
i) Calculated the egress elements to ensure adequate exit width for the occupant load				
j) Identified and document deficiencies in the egress elements				
k) Used applicable codes and standards to determine compliance				

Examiner/Candidate Comments:

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 4 - Field Inspection

Determine the building's area, height, occupancy classification, and construction type

PERFORMANCE STANDARD

Section 402- 5.3.3

NFPA 1031 5.3.3

Fire Inspector II

OBJECTIVE

Determine the building's area, height, occupancy classification, and construction type, given an approved plan, a description of a building, or observations of construction features, so that they are in accordance with the applicable codes and standards. (NFPA 1031-5.3.3)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate given an approved plan, a description of a building, or observations of construction features, the Inspector Candidate will:

- Determine the building's area, height, occupancy classification, and construction type

EXAMINER NOTE:

Skill examiners shall ensure realism in the fire inspection process by verifying that the mixed occupancy or building provides the minimum elements required for skill demonstration and evaluation.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, forms, paper, applicable codes and standards, local practices and procedures, or a computer records management system with mobile inspection capturing ability. Provide applicable data or records containing information about the occupant or building to reflect past inspection, permits or other elements to support the preparation for inspection.

Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 4 Evaluator Information-Preparation and Equipment

Instruction	Example
Using a multi-use occupancy or building and observations, determine the construction type, area, height and occupancy use from an approved plan. Provide past collected information regarding the area, height, occupancy classification and construction type.	<i>Using past information on file and observations of existing conditions in the multi-use occupancy, compare the area, height, occupancy classification and construction type to have not changed and are in compliance with applicable codes and standards.</i>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 4 - Field Inspection				
Determine the building's area, height, occupancy classification, and construction type, given an approved plan, a description of a building, or observations of construction features, so that they are in accordance with the applicable codes and standards. (402-5.3.3)				
The candidate:	S	U	S	U
a) Identified the construction type				
b) Determined the building's area, height, occupancy classification				

Examiner/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as "Satisfactory" to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	
_____	_____	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 5 - Field Inspection
Evaluate fire protection systems and equipment

PERFORMANCE STANDARD

Section 402- 5.3.4

NFPA 1031 5.3.4

Fire Inspector II

OBJECTIVE

Evaluate fire protection systems and equipment provided for the protection of life safety, a building, or a facility, 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. Evaluate installation for compliance with applicable codes and standards so that deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction. (402-5.3.4)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given access to a mixed (multi-use) use occupancy or building will conduct a fire inspection. During the inspection, the Inspector Candidate will:

- Evaluate fire protection systems and equipment provided for the protection of life safety, a building, or a facility, given field observations of the facility and documentation, the hazards protected, and the system specifications
- Evaluate installation for compliance with applicable codes and standards so that deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction

EXAMINER NOTE:

Skill examiners shall ensure realism in the fire inspection process by verifying that the mixed occupancy or building provides the minimum elements required for skill demonstration and evaluation.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, forms, paper, applicable codes and standards, local practices and procedures, or a computer records management system with mobile inspection capturing ability. Provide applicable data or records containing information about the occupant or building to reflect past inspection, permits or other elements to support the preparation for inspection.

Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 5 Evaluator Information-Preparation and Equipment

Instruction	Example
<p>Provide fire protection system records to reflect testing and inspection of the fire protection equipment in the occupancy.</p>	<p><i>Using the test records for the fire sprinkler system in the occupancy, determine that all performance tests are being conducted in accordance with applicable codes and standards.</i></p> <p><i>Using the hydraulic data plate on the sprinkler riser or information provided from the design and test record information, verify the system is adequate for the hazard protected.</i></p> <p><i>Using the inspection tag hanging on the fire sprinkler system verify that the system is inspected or serviced in accordance with recognized codes and standards or applicable rules.</i></p>
<p>Using a multi-use occupancy, have the Inspector candidate inspect the fire protection systems and equipment provided.</p>	<p><i>Using observations of the fire sprinkler system identify sprinkler obstructions or impairments that would impede the sprinkler from performing in accordance with applicable codes or standards. (Sprinklers not installed under ducts that are 4 feet wide or wider.)</i></p> <p><i>Using observations and measuring tools, evaluate the installation of fire extinguishers to ensure travel distance is acceptable to the hazard protected.</i></p> <p><i>Using observations of the fire sprinkler system and hazard protected evaluate the system for installation deficiencies that impede fire sprinkler performance.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 5 - Field Inspection				
Evaluate fire protection systems and equipment provided for the protection of life safety, a building, or a facility, 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. Evaluate installation for compliance with applicable codes and standards so that deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction. (402-5.3.4)				
The candidate:	S	U	S	U
a) Determined if the system is applicable to the hazard protected through observations, and reading reports, plans and specifications				
b) Identified applicable code and standards for the system and hazard				
c) Identified deficiencies in system installation				
d) Recognized problems with fire behavior implications to the protected hazard				
e) Documented and reported deficiencies				

Examiner/Candidate Comments:

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION

Fire Inspector II

Performance Standards

Skill Number 6 - Field Inspection

Evaluate hazardous conditions and
Verify code compliance for storage

PERFORMANCE STANDARD

Section 402- 5.3.6, 5.3.8, 5.3.9

NFPA 1031 5.3.6, 5.3.8, 5.3.9

Fire Inspector II

OBJECTIVE

Evaluate hazardous conditions involving equipment, processes, and operations, given field observations and 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. (NFPA 1031-5.3.6)

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. (NFPA 1031-5.3.8)

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. (NFPA 1031-5.3.9)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given access to mixed (multi-use) use occupancy or building, field observations, documentation, and inspection guidelines from the authority having jurisdiction the Inspector candidate will:

- Evaluate hazardous conditions involving equipment, processes, and operations
- Verify code compliance for storage, handling, and use of flammable and combustible liquids and gases
- Evaluate code compliance for the storage, handling, and use of hazardous materials

EXAMINER NOTE:

Skill examiners shall ensure realism in the fire inspection process by verifying that the mixed occupancy or building provides the minimum elements required for skill demonstration and evaluation.

TEXAS COMMISSION ON FIRE PROTECTION

Fire Inspector II

Performance Standards

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, forms, paper, applicable codes and standards, local practices and procedures, or a computer records management system with mobile inspection capturing ability. Provide applicable data or records containing information about the occupant or building to reflect past inspection, permits or other elements to support the preparation for inspection.

Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 6 Evaluator Information-Preparation and Equipment

Instruction	Example
<p>Given a fire inspection situation involving a multi-use or mixed occupancy, that contains a hazardous process, storage of flammable liquids and or hazardous materials in storage, use and dispensing.</p> <p>Inspector candidate will evaluate the conditions of equipment, storage, handling or use of flammable or combustible liquids or hazardous materials.</p> <p>Inspector candidate will verify the processes or operations to ensure the minimum code requirements are met and the deficiencies are identified.</p>	<p><i>The mixed use occupancy of the automobile dealership has automotive spray finishing within a spray booth. The ventilation system does not operate and filters are not in place.</i></p> <p><i>Storage of automotive paints in a room that does not contain secondary containment or fire resistive separation.</i></p> <p><i>Flammable automotive paints are mixed and handled in an unventilated room.</i></p> <p><i>Violation: Spray hood is not maintained in accordance with the code. 1) Ventilation system is inoperative. 2) Filters are not in place. IFC Section 1504.7.8</i></p> <p><i>Provide secondary containment and fire resistive storage room. IFC Section 1503.3, Section 3404.3.7.3</i></p> <p><i>Provide ventilation as required by the code. IFC Section 3405.3.7.5.1</i></p> <p>Notice: <i>Cease spray painting or use; repair or maintain; call for re-inspection.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 6 - Field Inspection				
Evaluate hazardous conditions involving equipment, processes, and operations, given field observations and 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. (402-5.3.6)				
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. (402-5.3.8)				
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. (402-5.3.9)				
The candidate:	S	U	S	U
a) Through observation, ensured that the equipment, processes or operations were installed in accordance with applicable codes or standards				
b) Identified and documented deficiencies or problems of the equipment, processes or operations				
c) Reported deficiencies according to policies of the jurisdiction				

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

d) Identified the process or operation (storage, use and/or dispensing)				
e) Recognized fire hazards associated with the process or operation				
f) Identified specific code or standards applicable to the process or operation hazard				
g) Identified and documented all deficiencies in accordance with the authority having jurisdiction				
h) Reported all deficiencies				

Examiner/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

<hr/>	<hr/>	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
<hr/>	<hr/>	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 7 - Field Inspection

Evaluate emergency planning and preparedness procedures

PERFORMANCE STANDARD

Section 402- 5.3.7

NFPA 1031 5.3.7

Fire Inspector II

OBJECTIVE

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. (NFPA 1031-5.3.7)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given copies of existing or proposed plans and procedures of a facility, the Inspector Candidate will:

- Evaluate emergency planning and preparedness procedures to determine their applicability to the facility and their compliance with codes and standards

EXAMINER NOTE:

Skill examiners shall ensure realism in the fire inspection process by verifying that the mixed occupancy or building provides the minimum elements required for skill demonstration and evaluation.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, forms, paper, applicable codes and standards, local practices and procedures, or a computer records management system with mobile inspection capturing ability. Provide applicable data or records containing information about the occupant or building to reflect past inspection, permits or other elements to support the preparation for inspection.

Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

Skill Number 7 Evaluator Information-Preparation and Equipment

Instruction	<i>Example</i>
<p>Using an emergency plan for a multi-use occupancy or building, the Inspector candidate shall review the plans and procedures to ensure the applicability to the occupancy or building.</p>	<p><i>Using the applicable plan and observations of the multi-use occupancy or building, determine if the plans addresses the hazards present and provides for a level of life safety and emergency preparedness.</i></p> <p><i>Using the applicable plan, verify the last time the occupants or employees were trained in the plan or the plan was drilled.</i></p> <p><i>Using the applicable plan, determine the last review date for the plan.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 7 - Field Inspection				
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. (402-5.3.7)				
The candidate:	S	U	S	U
a) Verified the plan is appropriate for the facility				
b) Reviewed the plan as it applies to codes and standards				
c) Identified, documented and reported all deficiencies in accordance with the authority having jurisdiction				

Examiner/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 8 - Field Inspection

Determine fire growth potential in a building or space

PERFORMANCE STANDARD

Section 402- 5.3.10

NFPA 1031 5.3.10

Fire Inspector II

OBJECTIVE

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. (NFPA 1031-5.3.10)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given field observations or plans of a multi-use building or occupancy, the Inspector Candidate will:

Determine fire growth potential in the building or space so that the contents, interior finish, and construction elements are evaluated for compliance with applicable codes and standards and all deficiencies are identified, documented, and corrected in accordance with the policies of the jurisdiction.

EXAMINER NOTE:

Skill examiners shall ensure realism in the fire inspection process by verifying that the mixed occupancy or building provides the minimum elements required for skill demonstration and evaluation.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, forms, paper, applicable codes and standards, local practices and procedures, or a computer records management system with mobile inspection capturing ability. Provide applicable data or records containing information about the occupant or building to reflect past inspection, permits or other elements to support the preparation for inspection.

Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

Skill Number 8 Evaluator Information-Preparation and Equipment

Instruction	Example
Using the multi-use building or occupancy, have the Inspector candidate inspect the building or occupancy for combustibility and flammability of the contents, interior finish and construction materials.	<i>Determine the combustibility of the contents of the furniture retail store with its associated storage area in the Type II constructed building.</i>
Have the Inspector candidate express verbally as to the expected fire growth rate based on the contents, interior finish and construction.	<i>Express the fire growth rate in terms of low, medium or high.</i>
Have the Inspector candidate identify and document hazardous conditions that would tend to spread the fire, speed up the fire or increase loss.	<i>Determine the anticipated heat release rates from past tests or other information.</i> <i>The idle pallets stored next to the battery charging area.</i> <i>The oxidizer pool chemicals stored next to the charcoal lighter fluid.</i>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 8 - Field Inspection				
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. (402-5.3.10)				
The candidate:	S	U	S	U
a) Identified building construction and use				
b) Recognized potential for hazardous fire growth				
c) Identified and documented all deficiencies contributing to hazardous fire growth				
d) Reported conditions contributing to hazardous fire growth				

Examiner/Candidate Comments:

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 9 - Field Inspection
Verify compliance with construction documents

PERFORMANCE STANDARD

Section 402- 5.3.11

NFPA 1031 5.3.11

Fire Inspector II

OBJECTIVE

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 all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction. (NFPA 1031-5.3.11)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given construction documents that involve a performance-based design, the Inspector Candidate will:

Verify compliance with the construction documents, 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 all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

EXAMINER NOTE:

Skill examiners shall ensure realism in the fire inspection process by verifying that the mixed occupancy or building provides the minimum elements required for skill demonstration and evaluation.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, forms, paper, applicable codes and standards, local practices and procedures, or a computer records management system with mobile inspection capturing ability. Provide applicable data or records containing information about the occupant or building to reflect past inspection, permits or other elements to support the preparation for inspection.

Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 9 Evaluator Information-Preparation and Equipment

Instruction	Example
<p>Provide the Inspector candidate with construction documents that involve a performance-based design.</p> <p>Have the Inspector candidate review and inspect the features of the performance based design elements to verify the installation; and that testing confirms performance to the performance based design. Verification of interaction between life safety systems and building services equipment should be accomplished.</p> <p>Have the Inspector candidate review operation and maintenance manuals that accompany the design.</p> <p>Have the Inspector candidate identify, document and report deficiencies in accordance with the policies of the jurisdiction.</p>	<p><i>Due to the size of a building and the travel distance to reach exits, a smoke control system will be installed in the building to facilitate smoke/heat removal to meet a performance concept of protection for the additional time needed to egress the building. Other elements in the performance design include sprinklers, smoke detection and code compliant occupancy separation.</i></p> <p><i>Upon fire alarm activation, air handlers 3 and 4 turn off and smoke exhaust fans 1 and 2 start. Testing confirms sequence and function to design.</i></p> <p><i>Operation manual does not reflect 24 hours, 7 days a week occupancy.</i></p> <p><i>Ensure maintenance and operation manuals incorporate service and testing based on exposure for 24 hour 7 day business.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 9 - Field Inspection				
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 all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction. (402-5.3.11)				
The candidate:	S	U	S	U
a) Identified construction documents are applicable to the building				
b) Verified safety system and building service equipment were installed, inspected and tested and were compliant with construction documents				
c) Identified, compared and documented all non-compliant safety systems and building services equipment to construction documents				
d) Reported all deficiencies in accordance with local policies				

Examiner/Candidate Comments:

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 10 - Field Inspection
Verify code compliance of building systems

PERFORMANCE STANDARD

Section 402- 5.3.12

NFPA 1031 5.3.12

Fire Inspector II

OBJECTIVE

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. (402-5.3.12)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given field observations, the Inspector Candidate will:

Verify code compliance of heating, ventilation, air conditioning, and other building service equipment and operations, 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.

EXAMINER NOTE:

Skill examiners shall ensure realism in the fire inspection process by verifying that the mixed occupancy or building provides the minimum elements required for skill demonstration and evaluation.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, forms, paper, applicable codes and standards, local practices and procedures, or a computer records management system with mobile inspection capturing ability. Provide applicable data or records containing information about the occupant or building to reflect past inspection, permits or other elements to support the preparation for inspection.

Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Number 10 Evaluator Information-Preparation and Equipment

Instruction	Example
<p>Provide a building equipment service issue, have the inspector candidate observe, identify code issues and refer the issue as necessary to other agencies with expertise in the equipment installation.</p> <p>The inspector candidate will use the applicable codes and standards to validate issues.</p> <p>Document the deficiencies as required by the jurisdiction.</p>	<p><i>From observations of photos or conditions of a leaking grease duct, review the codes or standards for issues with the conditions.</i></p> <p><i>Review mechanical code 2009 International Fire Code, Chapter 6, Section 609. Commercial kitchen exhaust hood shall comply with the international mechanical code.</i></p> <p><i>Refer the leaking grease duct issue to the mechanical code inspector.</i></p> <p><i>Complete report to document referral of issue.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 10 - Field Inspection				
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. (402-5.3.12)				
The candidate:	S	U	S	U
a) Identify deficiencies with installed equipment				
b) Coordinate with or refer to other agencies with expertise				
c) Use applicable codes and standards				
d) Document deficiencies in accordance with policies and procedures				

Examiner/Candidate Comments:

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

Certifying Examiner	Date	Overall Skill Sheet Score
		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
Re-Test Certifying Examiner	Date	Overall Skill Sheet Re-Test Score
		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Numbers 11-15 - Plan Review

Classify the occupancy type, Compute occupant load, Review installation of fire protection systems, and Verify means of egress and construction type

PERFORMANCE STANDARD

**Sections 402-5.4.1, 5.4.2,
5.4.3, 5.4.4, 5.4.5, 5.4.6**

NFPA 1031 5.4.1, 5.4.2, 5.4.3, 5.4.4, 5.4.5, 5.4.6

Fire Inspector II

OBJECTIVE

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. (NFPA 1031-5.4.1)

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 applicable codes and standards. (NFPA 1031-5.4.2)

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 all deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction. (NFPA 1031-5.4.3)

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. (NFPA 1031-5.4.4)

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 any deficiencies are discovered and communicated in accordance with the policies of the jurisdiction. (NFPA 1031-5.4.5)

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.
(NFPA 1031-5.4.6)

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given a set of plans, specifications, a description of a building and the established practices and procedures of the jurisdiction, shall:

- Classify the occupancy type
- Compute the maximum allowable occupant load
- Review the proposed installation of fire protection systems
- Review the installation of fire protection systems
- Verify that means of egress elements are provided
- Verify the construction type of a building or portion thereof
- Report to the plan submitter with applicable references to code and standards and alternative methods for compliance identified.

This should be accomplished during one time period of evaluation of the skill set.

EXAMINER NOTE:

The plan review skills build upon each other in a progressive format, but their order may be changed as needed, based on jurisdictional processes.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead if applicable. Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Skill Numbers 11-15 Evaluator Information-Preparation and Equipment

Instruction	Example
<p>Provide a set of occupancy or building plans, specifications and description to the Inspector candidate. The set of plans should incorporate site, architectural, mechanical, electrical, plumbing, landscaping, and fire protection shop drawings. The Inspector candidate will review the information and plans to accomplish a set of skills within one time period. Ensure adequate room for plans reading, code and standards references are available.</p> <p>Have the Inspector candidate review and interpret the plans, specifications and description to:</p> <ul style="list-style-type: none"> a) Classify the occupancy type. b) Calculate the maximum allowable occupant load of the building or portion of the building. c) Verify shop drawings of proposed fire protection systems. d) Verify means of egress. <p>Verify construction type.</p> <p>Have the Inspector candidate apply the code and standard requirements to verify compliance.</p> <p>The Inspector candidate shall complete an installation review with the approved plans.</p>	<p><i>24,000 square foot Religious assembly occupancy with associated classrooms, kitchen and offices</i></p> <ul style="list-style-type: none"> <i>a) A2 Occupancy Group</i> <i>b) 497 occupant load for the A2 area</i> <i>c) UL 300 system proposed – Kitchen hood and duct fire protection extinguishing system</i> <i>d) Main entrance door swing does not open in direction of egress per the occupant load.</i> <p><i>Type IIB (non-combustible, non-rated)</i></p> <p><i>UL 300 systems proposed – Kitchen hood and duct fire protection extinguishing system does not completely cover the entire cooking surfaces or appliances.</i></p> <p><i>Installation reviewed; no deficiencies noted.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

Classify the occupancy type	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Numbers 11- Plan Review				
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. (402-5.4.1)				
The candidate:	S	U	S	U
a) Reviewed a set of plans, specifications and a building description				
b) Classified the occupancy type				
c) Indicated the applicable codes and standards				

Compute the occupant load	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Numbers 12- Plan Review				
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 applicable codes and standards. (402-5.4.2)				
The candidate:	S	U	S	U
a) Reviewed a floor plan of a building or portion of a building				
b) Identified occupant load factors related to the occupancy type				
c) Computed the occupancy load using appropriate measuring tools				
d) Indicated the applicable codes and standards				

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Review the installation of fire protection systems	<u>TEST</u>		<u>RETEST</u>	
Skill Numbers 13- Plan Review	PASS	FAIL	PASS	FAIL
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 all deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction. (402-5.4.3)				
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. (402-5.4.4)				
The candidate:	S	U	S	U
a) Read basic floor plans or shop drawings to identify symbols and elements of the fire protection system.				
b) Uses applicable codes and standards to identify deficiencies in the plan and installation.				
c) Documents and reports all deficiencies in accordance with the policies of the jurisdiction				

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
Performance Standards

Verify means of egress elements	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Numbers 14- Plan Review				
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 any deficiencies are discovered and communicated in accordance with the policies of the jurisdiction. (402-5.4.5)				
The candidate:	S	U	S	U
a) Determined whether the egress components in the building aligned with the plan				
b) Identified the egress elements in the building plan				
c) Used applicable codes and standards to determine compliance				
d) Identified and documented deficiencies in the egress elements				

Verify the construction type of a building	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Numbers 15- Plan Review				
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. (402-5.4.6)				
The candidate:	S	U	S	U
a) Used approved plans and specifications to identify the building's construction type				
b) Identified two characteristics of the building's construction type				
c) Used applicable codes and standards to determine compliance				

Examiner/Candidate Comments:

TEXAS COMMISSION ON FIRE PROTECTION
Fire Inspector II
 Performance Standards

All steps of the skill objective are mandatory and must be scored as “Satisfactory” to pass the skill.

_____	_____	Overall Skill Sheet Score
Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
_____	_____	Overall Skill Sheet Re-Test Score
Re-Test Certifying Examiner	Date	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

INSTRUCTION SHEET

PLAN EXAMINER I PERFORMANCE SKILLS

Format

Similar Plan Examiner I skills are combined into one skill sheet when possible. These skill sheets should be used in a progressive type grading format. The skill sheet is divided into individual skill objectives. The Examiner should evaluate the Plan Examiner I candidates as they complete each skill of the evaluation. The skills that could not be combined are provided as independent skill sheets.

For skill sheets that do not contain time constraints, the Course Instructor should specify time constraints as necessary.

Scoring Method

The scoring method is Satisfactory (S) or Unsatisfactory (U) for each step of the skill objective, and a Pass or Fail for each individual skill section. In order to successfully pass an individual skill section, the Plan Examiner I candidate must receive satisfactory scores in all the steps of the skill objective. In order to receive an overall Pass on the skill sheet, the Plan Examiner I candidate must receive a passing score for all individual skill sections.

If a step of a skill objective is scored “Unsatisfactory”, only that skill objective must be retested. For example, if a candidate fails step b of Skill 11, he or she must be retested on Skill 11, in its entirety. Any Unsatisfactory or individual skill failure shall require the examiner to explain the reason for the failure in written form in the comments section of the skill sheet.

Preparation and Equipment

Where necessary, additional information is provided under the heading “Evaluator Information- Preparation and Equipment.” Examples are provided to assist the evaluator. Course Instructors are encouraged to use these examples to meet the minimum requirements, or they may modify the examples to meet or exceed the standard to fit their department or agency needs.

Many of the skill sheets require the use of department policies. It is suggested that the Course Instructors use the policies and procedures of his or her department. If teaching this course at a non-departmental institution, acquire a fire department’s policies and procedures, or modification thereof, to complete these skills.

For optimal learning, scenario-based training and role-playing is recommended; however, based on departmental needs certain activities may be simulated by other means.

TEXAS COMMISSION ON FIRE PROTECTION
Plan Examiner I
Performance Standards

Skill Number 1- Administration

Prepare reports, Facilitate the resolution of deficiencies, Process plan review documents, and Determine the applicable code or standard

PERFORMANCE STANDARD

Sections 470-7.2.1, 7.22, 7.2.3, 7.2.4

NFPA 1031 7.2.1, 7.22, 7.2.3, 7.2.4

Plan Examiner I

OBJECTIVE

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. (NFPA 1031-7.2.1)

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. (NFPA 1031-7.2.2)

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. (NFPA 1031-7.2.3)

Determine the applicable code or standard, given a fire protection issue, so that the proper document, edition, and section are referenced. (NFPA 1031-7.2.4)

INSTRUCTIONS - procedures for achieving the objectives

Inspection situations should encompass enough detail and information to facilitate realistic plan review activities. This skill is intended to resemble a realistic situation in which a plans examiner would perform.

- The Inspector candidate, given specific observations from a plan review, will prepare a report in accordance with applicable codes and standards, and the policies and procedures of the jurisdiction.
- The Inspector candidate, given a submittal and the established practices and procedures of the jurisdiction, shall identify deficiencies, document the deficiencies, and report to the plan submitter with applicable references to code and standards and alternative methods for compliance are identified.
- The Inspector candidate, given a set of plans and specifications, shall evaluate to issue or deny a permit in accordance with the policies of the jurisdiction.
- The Inspector candidate, given a specific plan review fire protection issue, shall determine the applicable code or standard so that the proper document, edition, and section are referenced.

EXAMINER NOTE:

PLAN EXAMINER I

ADMINISTRATION SKILLS
PAGE 1

EFFECTIVE JANUARY 1, 2011

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TEXAS COMMISSION ON FIRE PROTECTION
Plan Examiner I
 Performance Standards

The plan review skills build upon each other in a progressive format, but their order may be changed as needed, based on jurisdictional processes.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead if applicable. Additional preparation and equipment information is located with the specific performance skill.

Skill Number 1
 Administration

Skill Number 1 Evaluator Information-Preparation and Equipment

Instruction	Example
Provide a complete set of plans submittal situation with an obvious definitive fire protection issue or deficiency.	<i>B occupancy, 4200 sq. ft. Doctors office, w/minor outpatient surgery. Civil, Arch, Mech, Elec, FP, Fire Alarm Submittal, Specifications</i>
Provide a copy of a policy statement or statements that would address the practices and procedures of the jurisdiction.	<i>A one-page fire alarm plan submittal without any state licensing information provided on the plan submittal.</i>
Provide a copy of an applicable policy for processing plan review documents.	<i>A one page hydraulically calculated fire sprinkler plan submittal without any hydraulic calculations provided with the plan.</i>
Provide a permit form for the applicable jurisdiction.	<i><u>Specification:</u> Fire Extinguishers shall be 2A 10 BC rated in all areas of the restaurant.</i>
Provide a log page to document status of plan review and incorporate any permit numbers.	<i><u>Issue:</u> Cooking areas may require a class K extinguisher.</i>
Inspector candidate will demonstrate the skill to facilitate resolution of deficiencies through a written report and verbalized alternative methods of compliance to reflect skill to resolve.	<i><u>Policy Statement:</u> All plans submitted with fire protection elements shall bear the state licensing data or seal of the registered person planning or designing the system.</i>
Inspector candidate will determine and identify applicable codes and standards to noted violations or issues.	<i><u>Policy Statement:</u> All fire protection submittals shall be complete submittals at time of submission.</i>

TEXAS COMMISSION ON FIRE PROTECTION
Plan Examiner I
Performance Standards

	<p><i>International Fire Code, (IFC) Section 901.2, Construction Documents. Page 1, Failed to provide complete information to verify code compliance. Provide Hydraulic Calculations as noted on the Plan. Alternative = No alternative</i></p> <p><u><i>Policy Statement:</i></u> <i>All plans submitted for review shall adhere to the following steps.</i></p> <ul style="list-style-type: none"><i>a. log into the plan submittal log</i><i>b. stamped with the date received</i><i>c. assigned permit number is reflected</i><i>d. verify contact information</i> <p><u><i>Policy Statement:</i></u> <i>Every effort shall be made to complete plans review within 10 workdays of received date stamp.</i></p> <p><i>Permit # 2006-001, 2222 First St., Under review, Received = 2/12/10</i></p>
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TEXAS COMMISSION ON FIRE PROTECTION
Plan Examiner I
 Performance Standards

Skill Number 1
 Administration

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 1				
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. (470-7.2.1)				
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. (470-7.2.2)				
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. (470-7.2.3)				
Determine the applicable code or standard, given a fire protection issue, so that the proper document, edition, and section are referenced. (470-7.2.4)				
The candidate:	S	U	S	U
a) Prepared a report from provided observations				
b) Report was clear & concise				
c) Report was in accordance with applicable codes and standards				
d) Report was in accordance with local policies and procedures				
e) Used local practices and policies				
f) Identified and documented deficiencies in writing				
g) Verbalized alternative methods of compliance				
h) Determined completeness of plan review documents				
i) Adhered to the applicable policies for processing the plan review documents				
j) Determined whether to deny or approve a permit				
k) Documented actions in accordance with local policies and procedures				
l) Identified the specific fire protection issue				
m) Determined the applicable code or standard				

TEXAS COMMISSION ON FIRE PROTECTION
Plan Examiner I
Performance Standards

Skill Number 2 - Plans Review

Identify the requirements for fire protection or a life safety system,
Evaluate code compliance, and Evaluate plans for the
installation of fire protection and life safety systems

PERFORMANCE STANDARD

Sections 470-7.3.1, 7.3.6, 7.3.10

NFPA 1031 7.3.1, 7.3.6, 7.3.10

Plan Examiner I

OBJECTIVE

Identify the requirements for fire protection or a life safety system, given a set of plans, so that all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction. (NFPA 1031-7.3.1)

Evaluate code compliance for required fire flow and hydrant location and spacing, given a plan, required fire flow, and fire flow test results, so that hydrants are correctly located and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction. (NFPA 1031-7.3.6)

Evaluate plans for the installation of fire protection and life safety systems, given a plan submittal, so that the fire protection systems, including pre-engineered systems, and equipment are reviewed and all deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction. (NFPA 1031-7.3.10)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given a set of plans, will demonstrate the ability to read basic plans and identify symbols used by the jurisdiction, and apply codes and standards, and identify, document and report all deficiencies in accordance with the policies of the jurisdiction.

The Inspector candidate, given a set of plans, required fire flow, and fire flow test results, will interpret fire flow test results, determine fire hydrant locations and spacing, and read fire flow graphs.

The Inspector candidate, given a plan submittal, shall review the specifications, classify occupancies and interpret and apply standards to the fire protection systems, and identify, document and report all deficiencies in accordance with the policies of the jurisdiction.

EXAMINER NOTE:

The plan review skills build upon each other in a progressive format, but their order may be changed as needed, based on jurisdictional processes.

PLAN EXAMINER I

PLAN REVIEW SKILLS
PAGE 1

EFFECTIVE JANUARY 1, 2011

TEXAS COMMISSION ON FIRE PROTECTION
Plan Examiner I
Performance Standards

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead if applicable. Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
Plan Examiner I
 Performance Standards

Skill Numbers 2
 Plans Review

Skill Number 5 Evaluator Information-Preparation and Equipment

Instruction	Example
<p>Provide a set of plans that reflects a fire protection or a life safety system and water supply and fire hydrant locations.</p> <p>Provide fire flow test results.</p> <p>Provide applicable codes and standards for the fire protection or life safety system.</p> <p>Review plans and specifications.</p> <p>Candidate will identify or classify the occupancy type.</p> <p>Identify, document and report any deficiencies noted.</p> <p>Interpret and apply applicable standards and reference the codes and standards to verify compliance.</p>	<p><i>Given a set of plans, review the plans and specifications for the occupancy and the system such as a roof/ceiling plan with smoke & heat venting for high piled storage, dimensions, vent ratio and specifications as to the type of smoke and heat vents, or sprinkler plans, fire alarm plans, kitchen extinguishing system, etc.</i></p> <p><i>Provide a site plan with utility drawings for occupancy such as a warehouse.</i></p> <p><i>Provide a fire flow test graph showing the amount of water that is available at 20 psi residual pressure for firefighting.</i></p> <p><i>Review the system and verify that all required components are complete and that the system is adequate for the occupancy.</i></p> <p><i>Verify the type of occupancy and the type of required protection.</i></p> <p><i>Candidate will review the plans and then interpret the applicable codes and apply those codes</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Plan Examiner I
 Performance Standards

Skill Number 2
 Plans Review

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 2				
Identify the requirements for fire protection or a life safety system, given a set of plans, so that all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction. (701-7.3.1)				
Evaluate code compliance for required fire flow and hydrant location and spacing, given a plan, required fire flow, and fire flow test results, so that hydrants are correctly located and all deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction. (470-7.3.6)				
Evaluate plans for the installation of fire protection and life safety systems, given a plan submittal, so that the fire protection systems, including pre-engineered systems, and equipment are reviewed and all deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction. (701-7.3.10)				
The candidate:	S	U	S	U
a) Identified the requirements for fire protection or a life safety system				
b) Interpreted plan symbols used by the jurisdiction				
c) Applied applicable codes and standards to the system				
d) Identified, documented and reported the deficiencies				
e) Read fire flow results and interpret				
f) Verify hydrant location and spacing				
g) Reviewed plans and specifications				

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Performance Standards

Skill Number 3 - Plans Review

Verify the classification of the occupancy type, construction type, occupant load, and required egress is provided, Evaluate emergency vehicle access

PERFORMANCE STANDARD

**Sections 470-7.3.2, 7.3.3, 7.3.4,
7.3.5, 7.3.7**

NFPA 1031 7.3.2, 7.3.3, 7.3.4, 7.3.5, 7.3.7

Plan Examiner I

OBJECTIVE

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. (NFPA 1031-7.3.2)

Verify the classification of the construction type, given a set of plans, including the proposed area, height, number of stories, and location, so that the proposed building is classified in accordance with applicable codes and standards and deficiencies are identified, documented, and reported. (NFPA 1031-7.3.3)

Verify the occupant load, given a set of plans, so that the maximum allowable occupant load is in accordance with applicable codes and standards. (NFPA 1031-7.3.4)

Verify that required egress is provided, given a set of plans 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. (NFPA 1031-7.3.5)

Evaluate emergency vehicle access, given a plan, so that 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. (NFPA 1031-7.3.7)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given a set of plans, specifications and a description of a building and its intended use, verify the occupancy classification in accordance with applicable codes and standards.

The Inspector candidate, given a set of plans, shall verify the construction type and that the area, height, number of stories and location is in accordance with applicable codes and standards and any deficiencies are identified, documented and reported.

The Inspector candidate, given a set of plans and measuring tools will accurately calculate the occupant load, and identify occupancy factors related to various occupancy types.

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The Inspector candidate, given a set of plans and an occupant load will verify that required egress is provided and identify, document and report deficiencies in accordance with the policies of the jurisdiction.

The Inspector candidate, given a set of plans, will interpret and use plan scale to evaluate code compliance of emergency vehicle access and identify, document and report deficiencies in accordance with the policies of the jurisdiction.

EXAMINER NOTE:

The plan review skills build upon each other in a progressive format, but their order may be changed as needed, based on jurisdictional processes.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead if applicable. Additional preparation and equipment information is located with the specific performance skill.

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Performance Standards

Skill Number 3 Evaluator Information-Preparation and Equipment

Instruction	Example
<p>Provide a complete set of plans and specifications for a single occupancy.</p> <p>Provide a plan so that the occupant load can be determined.</p> <p>Provide information as necessary to achieve the objectives.</p>	<p><i>Mercantile Occupancy, Civil, Arch, Structural, Elec., Plumb., Mech., FP</i></p> <p><i>Assembly Occupancy such as a church sanctuary with pews.</i></p>
<p>Provide a copy of applicable codes and standards to verify occupancy class and occupant load.</p>	<p><i>International Building Code Chapter 10, 2009 ed.</i></p>
<p>Use measuring tools to determine occupant load.</p>	<p><i>Using the correct measuring device, such as an architect's scale, and the correct reference, the candidate should accurately calculate the occupant load.</i></p>
<p>Identify the occupancy factors related to the occupancy type</p>	<p><i>Candidate shall identify that the church with pews allows one person per 18".</i></p>
<p>Accurately calculate the occupant load</p>	<p><i>Occupant load is 429.</i></p>
<p>Using the calculated occupant load verify that adequate egress was provided. Exit widths, number of exits and location of the exits.</p>	<p><i>Verify the total amount of egress capability based on the occupant load.</i></p>
<p>Identify the construction type</p>	<p><i>Noncombustible – Type IIB</i></p>
<p>Verify emergency vehicle access is in compliance with the code for widths, distances, clearance heights and turning radiuses.</p>	<p><i>Fire lane is a dead end into the rear parking lot and exceeds the limits allowed – provide a turnaround or hammerhead to allow emergency vehicles to turn around.</i></p>
<p>Identify, document and report all deficiencies.</p>	<p><i>The rear exit door does not have the required landing on the exterior side.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
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 Performance Standards

Skill Number 3
 Plans Review

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 3				
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. (470-7.3.2)				
Verify the classification of the construction type, given a set of plans, including the proposed area, height, number of stories, and location, so that the proposed building is classified in accordance with applicable codes and standards and deficiencies are identified, documented, and reported. (470-7.3.3)				
Verify the occupant load, given a set of plans, so that the maximum allowable occupant load is in accordance with applicable codes and standards. (470-7.3.4)				
Verify that required egress is provided, given a set of plans 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. (470-7.3.5)				
Evaluate emergency vehicle access, given a plan, so that 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. (701-7.3.7)				
The candidate:	S	U	S	U
a) Evaluated the plan for occupancy use information				
b) Verified the plan to the specifications and building intended use				
c) Determined applicable code, standards or regulations				
d) Verified the occupancy class based on the codes and standards				
e) Identified fire hazards presented by various occupancies and operational features				
f) Calculated occupant loads correctly using various measuring				

TEXAS COMMISSION ON FIRE PROTECTION
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Performance Standards

Skill Number 4 - Plans Review

Recommend policies and procedures for the delivery of plan review services and Participate in legal proceedings

PERFORMANCE STANDARD

Sections 470-7.3.8, 7.3.9

NFPA 1031 7.3.8, 7.3.9

Plan Examiner I

OBJECTIVE

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. (NFPA 1031-7.3.8)

Participate in 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. (NFPA 1031-7.3.9)

INSTRUCTIONS - procedures for achieving the objectives

The Inspector candidate, given a management objective, shall recommend policies and procedures for the delivery of plan review services in accordance with due process of law.

The Inspector candidate, given findings of a plan review and consultation with legal counsel, shall participate in a mock legal proceeding, and testify with accuracy to the given facts and demeanor appropriate to the proceedings.

EXAMINER NOTE:

The order of the plan processing skills may be changed as needed based on jurisdictional processes.

PREPARATION & EQUIPMENT

Most skills require the use of a pen or pencil, paper, applicable codes and standards, local practices and procedures, and a computer with a printer or typewriter and official letterhead, if applicable. Additional preparation and equipment information is located with the specific performance skill.

TEXAS COMMISSION ON FIRE PROTECTION
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 Performance Standards

Skill Number 4
 Plans Review

Skill Number 4 Evaluator Information-Preparation and Equipment
 Specific management objective

Instruction	Example
<p>Provide a situation or incident that conflicts with current policies or procedures related to plan review and management objectives.</p> <p>Provide specific plan review findings.</p> <p>Provide mock legal consultation brief.</p> <p>Create a mock courtroom or panel environment for testimony.</p> <p>Present the case and question the candidate in the legal process</p>	<p><i><u>Policy:</u> Alternative construction methods and materials shall be in accordance with the fire code.</i></p> <p><i><u>Management Objective:</u> Provide customers with options for construction methods and materials.</i></p> <p><i><u>Situation:</u> During plan review, the plan examiner identifies a proposed installation that is noted as alternative to the code.</i></p> <p><i><u>Policy Recommendation:</u> All alternatives for construction methods and materials must be accompanied by supporting documents to reflect that the plan is prepared by, and bears the stamp of, a registered design professional.</i></p> <p><i>Provide a list of code deficiencies from a plan review.</i></p> <p><i>Provide a sample legal consultation brief identifying and explaining findings from a plan review.</i></p> <p><i>Arrange a classroom to resemble a courtroom or panel setting allowing for testimony of plan review findings.</i> <i>Provide a field examiner or instructor to challenge the testimony of the plan examiner candidate.</i></p>

TEXAS COMMISSION ON FIRE PROTECTION
Plan Examiner I
 Performance Standards

Skill Number 4
 Plans Review

Candidate: _____ Notes: _____

Training Provider: _____

Test Site: _____

	<u>TEST</u>		<u>RETEST</u>	
	PASS	FAIL	PASS	FAIL
Skill Number 4				
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. (470-7.3.8)				
Participate in legal proceedings, given the findings of a plan review and consultations with legal counsel, so that testimony is accurate and the plan reviewer's demeanor is appropriate to the proceeding. (470 - 7.3.9)				
The candidate:	S	U	S	U
a) Recognized problem with current policies and procedures in regards to construction methods and fire safety				
b) Read and interpreted construction plans and specifications to identify construction methods and materials related to fire safety				
c) Identified specific policy or procedure change to meet the scope of the management objective				
d) Researched and decided on a policy or procedure change, in accordance with jurisdictional policies and due process of the law				
e) Communicated, orally and in writing, recommended policy or procedure change and educated the customer as to why changes need to be made				
f) Justified recommendation and overcame objections				
g) Testify to facts and recognized opinions				
h) Provided accurate testimony				

Inspector I

Pitot tube and gauge

Conversion chart

Hydrant

Hydrant wrench

Fire flow test graph with required information provided

Applicable Codes and Standards

Access to existing fire detection and alarm systems (clarify – letter of agreement for off-site access?)

Portable fire extinguisher

Inspector II

Specific permit application form

Specific plan review application form

Complex complaint

Local and state laws and ordinances

Example of legal instrument for adopting or modifying the code

Example of policies and procedures for adopting or modifying the code

Example of local policies and procedures

Example of organizational management goals

Diagram and description of a multi-use building

Example of approved plans

Building plans or field observations from a building

Facility or facility information with a fire protection system

System plans and specification documentation

Sprinkler system shop drawings and specification documentation that includes deficiencies

Example of emergency plan

Hazard observations or plans

Examples of performance based design (construction) documents

Example of operation and maintenance manual

Examples of applicable design data

Examples of type 5 construction plans

Example of floor plan of a building or portion of a building

Inspection forms

Measuring tools

Flashlight

Plan Examiner I

Examples of specific observations from a plan review

Examples of specific plans and specifications

Examples of specific management objective

Examples of specific plan review fire protection issue

Examples of specific plan review findings and legal consultation brief

Examples of specific plan submittal

Inspector Skills

	A	B	C	D	E	F
1	DISCIPLINE	OBJECTIVE	#	SKILL NAME	FUNCTIONAL NAME	NFPA #
2	Inspector I	Administration	1	Administration	Prepare inspection reports; recognize the need for a permit, and Recognize the need for plan review	4.2.1, 4.2.2, 4.2.3
3	Inspector I	Administration	2	Administration	Investigate common complaints, Identify the applicable code or standard, Participate in legal proceedings	4.2.4, 4.2.5, 4.2.6
4	Inspector I	Field Inspection	3	Field Insp.	Identify the occupancy classification; Compute the allowable occupant load, Inspect means of egress elements, and Verify the type of construction	4.3.1, 4.3.2, 4.3.3, 4.3.4
5	Inspector I	Field Inspection	4	Field Insp.	Determine the operational readiness of existing fixed fire suppression systems, fire detection alarm systems, and portable fire extinguishers; Compare an approved plan to an existing fire protection system	4.3.5, 4.3.6, 4.3.7, 4.3.9
6	Inspector I	Field Inspection	5	Field Insp.	Recognize hazardous conditions, Verify code compliance for incidental storage, handling, and use of flammable and combustible liquids, gases, and hazardous materials; Determine code compliance	4.3.8, 4.3.12, 4.3.13, 4.3.15
7	Inspector I	Field Inspection	6	Field Insp.	Recognize a hazardous fire growth potential	4.3.14
8	Inspector I	Field Inspection	7	Field Insp.	Verify emergency planning and preparedness, Inspect emergency access, and Verify fire flows	4.3.10, 4.3.11, 4.3.16
9	Inspector I	GENERAL	8	HM Awareness	Collecting Hazard Information	4.3.13 (NFPA 472-4.2.3)
10	Inspector II	Administration	1	Administration	Process Permit Application and a Plan Review Application, Investigate Complex Complaints, and Recommend Modifications	5.2.1, 5.2.2, 5.2.3, 5.2.4
11	Inspector II	Administration	2	Administration	Recommend policies and procedures	5.2.5
12	Inspector II	Field Inspection	3	Field Insp.	Compute occupant load, occupancy classifications, and Analyze egress	5.3.1, 5.3.2, 5.3.5
13	Inspector II	Field Inspection	4	Field Insp.	Determine the building's area, height, occupancy classification, and construction type	5.3.3
14	Inspector II	Field Inspection	5	Field Insp.	Evaluate fire protection systems and equipment	5.3.4
15	Inspector II	Field Inspection	6	Field Insp.	Evaluate hazardous conditions and Verify code compliance for storage	5.3.6, 5.3.8, 5.3.9

Inspector Skills

	A	B	C	D	E	F
16	Inspector II	Field Inspection	7	Field Insp.	Evaluate emergency planning and preparedness procedures	5.3.7
17	Inspector II	Field Inspection	8	Field Insp.	Determine fire growth potential in a building or space	5.3.10
18	Inspector II	Field Inspection	9	Field Insp.	Verify compliance with construction documents	5.3.11
19	Inspector II	Field Inspection	10	Field Insp.	Verify code compliance of building systems	5.3.12
20	Inspector II	Plans Review	11	Field Insp.	Classify the occupancy type	5.4.1
21	Inspector II	Plans Review	12	Plans Review	Compute the occupant load	5.4.2
22	Inspector II	Plans Review	13	Plans Review	Review the installation of fire protection systems	5.4.3, 5.4.4
23	Inspector II	Plans Review	14	Plans Review	Verify means of egress elements	5.4.5
24	Inspector II	Plans Review	15	Plans Review	Verify the construction type of a building	5.4.6
25	Plan Examiner I	Administration	1	Administration	Prepare reports, Facilitate the resolution of deficiencies, Process plan review documents, and Determine the applicable code or standard	7.2.1, 7.2.2, 7.2.3, 7.2.4
26	Plan Examiner I	Plans Review	2	Plans Review	Identify the requirements for fire protection or a life safety system, Evaluate code compliance, and Evaluate plans for the installation of fire protection and life safety systems	7.3.1, 7.3.6, 7.3.10
27	Plan Examiner I	Plans Review	3	Plans Review	Verify the classification of the occupancy type, construction type, occupant load, and required egress is provided, Evaluate emergency vehicle access	7.3.2, 7.3.3, 7.3.4, 7.3.5, 7.3.7
28	Plan Examiner I	Plans Review	4	Plans Review	Recommend policies and procedures for the delivery of plan review services and Participate in legal proceedings	7.3.8, 7.3.9