



CONTRACTORS STATE LICENSE BOARD LICENSE EXAMINATION STUDY GUIDE



FIRE PROTECTION (C-16)

Content of the Examination

The Fire Protection (C-16) Examination is divided into five major sections:

1. Plans, Specifications, and Layout (18%)

- Read and interpret plans and specifications
- Application and limitations of various types of fire protection systems
- Fire sprinkler position, location, and spacing
- Determining water requirements

2. Design and Estimation (16%)

- Standards relevant to system design
- Hydraulic calculations
- Estimation techniques
- Seismic bracing requirements

3. Fire Protection System Installation (33%)

- Installation of underground systems, pumps, and components
- Installation of overhead systems (residential and commercial)
- Installation of fire suppression and specialized systems
- Installation of control valves, supervisory devices, and other related components

4. Testing, Maintenance, Repair, and Replace (18%)

- Standards related to overhead, underground, pumps, suppression, and specialized fire protection system testing and maintenance.
- Tools and methods used to test and troubleshoot systems and their components.
- Repairing and/or replacing components and systems.

5. Safety (15%)

- Personal protective equipment
- Safely working in elevated areas
- Trenching safety
- Safe job site practices

Percentages are approximate

Test Site Policy

This is a closed-book examination. No reference materials may be used during the examination. All materials brought to the examination site must be left in an unmonitored area at your own risk.

Test Strategy

This is a multiple-choice examination with four choices per question. Examination questions are written to provide only one BEST answer. Some questions require mathematical computation. A calculator will be provided.

There is no penalty for guessing. If you are unsure about a particular question, it is better to try to answer the question than to leave the question blank.

Plenty of time is provided to answer all examination questions, so be sure to read each question and its four choices completely and carefully before selecting the BEST possible answer to the question.

Sample Questions

Below are three typical examination questions. The correct answer is underlined.

1. What events are required to activate a preaction double interlock electric pneumatic system?
 - a. Operation of a water flow device and a drop in air pressure
 - b. Operation of a control valve and a sprinkler head
 - c. Operation of a fire pull station and a control valve
 - d. Operation of a detection device and a sprinkler head

2. When should a contractor perform an underground flush test?
 - a. Before connection to the supply source, and before connection to the system riser
 - b. Before connection to the supply source, and after connection to the system riser
 - c. After connection to the supply source, and before connection to the system riser
 - d. After connection to the supply source, and after connection to the system riser

3. According to NFPA 25, how long after installation should quick-response sprinklers be tested?
 - a. After 5 years
 - b. After 10 years
 - c. After 20 years
 - d. After 50 years

All questions are written and reviewed by licensed contractors who are actively working in the trade

Resources

*Publisher information for reference books and code is provided below. Other sources for reference books may be found online. **California code books can be viewed online: www.bsc.ca.gov***

**NFPA 13 (2016), NFPA 13D (2016)
NFPA 13R (2016), NFPA 14 (2016)
NFPA 17 (2013), NFPA 17A (2013)
NFPA 20 (2016), NFPA 24 (2016)
NFPA 25(A) (2013), NFPA 96 (2014)**

National Fire Protection Association.

PHONE: (800) 344-3555

INTERNET: www.nfpa.org

State of California General Industry & Electrical Safety Orders (Cal/OSHA) and State of California Construction & Electrical Safety Orders (Cal/OSHA). 2015. California Code of Regulations, Title 8. Mancomm.

PHONE: (877) 626-2666

INTERNET: www.mancomm.com

Publisher information is current as of 12/16