# Fire Alarm Lesson 7&8 Practice Test (Sample)

## Study Guide


**Everything you need from our exam experts!**

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# Introduction

**Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.**

**This guide was designed to help you do exactly that.**

**Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.**

**The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:**

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

**We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.**

**Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.**

**Let's begin.**

# How to Use This Guide

**This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here’s how to get the most out of your Examzify study guide:**

### 1. Start with a Diagnostic Review

**Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.**

### 2. Study in Short, Focused Sessions

**Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.**

### 3. Learn from the Explanations

**After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.**

### 4. Track Your Progress

**Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.**

### 5. Simulate the Real Exam

**Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.**

### 6. Repeat and Review

**Don’t just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.**

**There’s no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!**

# Questions

**1. Which party is not typically involved with the development of specifications?**

**A. Installer**

**B. Architect**

**C. Owner**

**D. Engineer**

**2. In-building fire emergency voice/alarm communications systems require what secondary power supply capacity?**

**A. 24 hours standby plus 15 minutes of all connected load**

**B. 8 hours standby plus 30 minutes of load**

**C. 12 hours standby**

**D. 24 hours standby only**

**3. What is the minimum required secondary power for an emergency radio communications enhancement system?**

**A. 6 hours**

**B. 12 hours**

**C. 24 hours**

**D. 48 hours**

**4. Areas defined as requiring intelligibility are called ?**

**A. Ads**

**B. Zones**

**C. Rooms**

**D. Areas**

**5. The location of rated walls and barriers are usually located on which drawings?**

**A. Architectural**

**B. Electrical**

**C. Structural**

**D. Fire protection / life safety**

**6. Areas defined as requiring intelligibility are called Ads.**

**A. Zones**

**B. Rooms**

**C. Outdoor spaces**

**D. Ads**

**7. Which of the following has the potential to cause poor speech intelligibility?**

**A. Echoes**

**B. Reverberation**

**C. Low S/N ratio**

**D. All of the above**

**8. Under the MasterSpec®, fire alarm specifications are found in Division?**

**A. Division 16**

**B. Division 32**

**C. Division 21**

**D. Division 28**

**9. Which documentation must be provided for all fire alarm system installations?**

**A. Calculations**

**B. Floor plans**

**C. Equipment list**

**D. Riser diagram**

**10. An emergency voice/alarm communications alert tone must sound at least ? times.**

**A. 2 times**

**B. 3 times**

**C. 5 times**

**D. 1 time**

# Answers

**1. A**
**2. A**
**3. B**
**4. A**
**5. D**
**6. D**
**7. D**
**8. D**
**9. D**
**10. B**

# Explanations

## 1. Which party is not typically involved with the development of specifications?

**A. Installer**

**B. Architect**

**C. Owner**

**D. Engineer**

**Developing specifications for a fire alarm system is driven by the project design and procurement process. The owner outlines goals, budget, and occupancy needs; the architect integrates the system into the building design; the engineer develops the technical requirements, including sensor types, placement, control panels, interconnections, and code compliance. These roles together produce the specifications that guide what equipment is needed and how the system should perform. The installer is focused on putting the system in place and ensuring it meets the specs, rather than drafting them. Therefore, the party not typically involved in developing specifications is the installer.**

## 2. In-building fire emergency voice/alarm communications systems require what secondary power supply capacity?

**A. 24 hours standby plus 15 minutes of all connected load**

**B. 8 hours standby plus 30 minutes of load**

**C. 12 hours standby**

**D. 24 hours standby only**

**The main idea is that emergency voice/alarm systems must stay operable during a power outage. To ensure this, the secondary power supply is sized to provide both long standby and sufficient run time at full load.  24 hours standby keeps the system ready without mains power for a full day, so warnings and monitoring can continue even during extended outages. At the same time, 15 minutes of all connected load guarantees the system can deliver full-power announcements across all connected devices (speakers, amplifiers, control gear) for a sufficient initial evacuation window if an alarm is triggered. This combination ensures the system is both ready and capable during an emergency.  Other options don't meet both needs: they either shorten standby time, reduce the duration of full-load operation, or both, which could compromise evacuation communications.**

## 3. What is the minimum required secondary power for an emergency radio communications enhancement system?

**A. 6 hours**

**B. 12 hours**

**C. 24 hours**

**D. 48 hours**

**Backup power for an emergency radio communications enhancement system is all about keeping critical communications up when the building's main power fails. The system needs to stay online long enough for responders to manage the incident, evacuate if needed, and either restore power or switch to an alternate communications method. Twelve hours is the minimum duration specified because it provides a reliable window that covers typical outage scenarios without requiring excessively large and costly battery banks or generators. Shorter durations, like six hours, risk losing communications during longer incidents, while longer durations (twenty-four or forty-eight hours) go beyond the minimum and add unnecessary expense for most situations.**

## 4. Areas defined as requiring intelligibility are called ?

**A. Ads**

**B. Zones**

**C. Rooms**

**D. Areas**

**The concept here is identifying spaces where speech messages during a fire alarm must be clearly understood. In voice alarm design, these spaces are designated as ADS, which stands for Areas Defined as requiring intelligibility. Marking areas as ADS ensures the system is planned to deliver highly intelligible verbal instructions in those zones, taking into account factors like background noise, reverberation, and distance from loudspeakers. This focus on intelligibility is what sets ADS apart from more generic terms like zones, rooms, or areas, which don't specify a requirement for clear spoken messages. For example, large gathering areas or corridors with higher ambient noise are typically treated as ADS so that occupants can reliably understand evacuation directions.**

## 5. The location of rated walls and barriers are usually located on which drawings?

**A. Architectural**

**B. Electrical**

**C. Structural**

**D. Fire protection / life safety**

**Rated walls and barriers are part of life-safety design aimed at compartmentalizing a building to slow fire spread and protect occupants. The details about where these fire-rated assemblies are located, how long they resist heat, and what doors or penetrations they include are documented on fire protection / life safety drawings. This set is specifically designed to show fire barriers, smoke barriers, rated walls, fire doors, and related details so code requirements and safety performance can be verified. Architectural drawings show layout and general construction but don't focus on the fire-resistance ratings of partitions. Electrical drawings map circuits and equipment, while structural drawings concentrate on load-bearing elements. None of these emphasize the fire-rating details in the same targeted way as fire protection / life safety drawings.**

## 6. Areas defined as requiring intelligibility are called Ads.

**A. Zones**

**B. Rooms**

**C. Outdoor spaces**

**D. Ads**

**In fire alarm design, some spaces must carry messages that occupants can hear and understand clearly. Those areas are designated as Ads—areas requiring intelligibility. That designation signals that the system should prioritize clear, understandable voice announcements or alarms in those zones, guiding speaker placement, volume, and noise control to meet intelligibility standards. Zones, rooms, and outdoor spaces are just general location types and don't specifically indicate a need for clearer messaging, which is why Ads is the best answer.**

## 7. Which of the following has the potential to cause poor speech intelligibility?

**A. Echoes**

**B. Reverberation**

**C. Low S/N ratio**

**D. All of the above**

**Speech intelligibility suffers when the sound signal arrives in ways that distort or mask the message. Echoes create delayed copies of the voice that arrive after the direct sound, causing overlapping sounds that blur syllables and can make it hard to understand what's being said. Reverberation is the buildup of many reflections in a space, so energy from speech lingers and blends with upcoming sounds; this tailing reduces the clarity of rapid speech cues like consonants, making words run together. A low signal-to-noise ratio means background noise is strong relative to the speech, masking parts of the message and forcing the listener to work harder to extract meaning. Because any of these factors can degrade understanding, all of the above can cause poor speech intelligibility.**

## 8. Under the MasterSpec®, fire alarm specifications are found in Division?

**A. Division 16**

**B. Division 32**

**C. Division 21**

**D. Division 28**

**In MasterSpec, fire alarm specifications sit in Division 28, the Electrical division. This is because fire alarm systems are electrical control and signaling systems, involving power supplies, wiring, control panels, and devices like smoke detectors and audible alarms. They're coordinated with electrical distribution and electrical standards, so they belong with other electrical work. Division 21 covers fire protection in the sense of fire suppression (sprinklers, stands, extinguishing systems), not the alarm signaling. Division 32 is site work and exterior improvements, not building interior systems, and Division 16 is mechanical. So Division 28 is the most appropriate home for the fire alarm specifications.**

## 9. Which documentation must be provided for all fire alarm system installations?

**A. Calculations**

**B. Floor plans**

**C. Equipment list**

**D. Riser diagram**

**The key idea is showing how the fire alarm system is distributed through the building vertically. A riser diagram maps the vertical path of the system—where the main control panel sits, how cables and wiring run between floors, and how devices on each level connect to the system. This vertical routing is essential for proper installation, inspection, and future maintenance, because it confirms that circuits, power supplies, and interconnections are laid out correctly across all floors. That's why a riser diagram is the required documentation for all fire alarm installations: it provides a complete, floor-to-floor view of the system's wiring and device layout, which inspectors and technicians rely on to verify compliance and to troubleshoot or modify the system later.**

## 10. An emergency voice/alarm communications alert tone must sound at least ? times.

**A. 2 times**

**B. 3 times**

**C. 5 times**

**D. 1 time**

**Repetition in emergency communications is crucial for making sure everyone hears and understands the message. The emergency voice/alarm alert tone is repeated multiple times so it can cut through background noise, reach people in different parts of the building, and give occupants multiple chances to notice and respond. Sounding it at least three times provides a clear, unmistakable cue without becoming overly disruptive. If it's only heard once, someone could miss it in a noisy area or from a distance. Two repetitions improve the odds but may still be overlooked in busy or echo-prone spaces. Five repetitions could become annoying and risk desensitization over time. Three times hits a practical balance, ensuring the alert is noticeable and prompts action.**

# Next Steps

**Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.**

**As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.**

**If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.**

**Or visit your dedicated course page for more study tools and resources:**

**https://firealarmlesson7and8.examzify.com**

**We wish you the very best on your exam journey. You've got this!**