Urban Search and Rescue (US&R) Structural Collapse Level 2 Advanced Sheet Practice Exam (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. **In breaching operations, which is a hazard related to moving loads?**
   - **A. Movement of large weights**
   - **B. Weather delays**
   - **C. Paperwork**
   - **D. Etiquette**

2. **The time of the day is a critical factor when combined with the occupancy type to help determine number of potential victims.**
   - **A. Weather**
   - **B. Season**
   - **C. Daylight**
   - **D. Time**

3. **How often should you rotate teams during operations?**
   - **A. Every 2 hours**
   - **B. Every 15-30 minutes**
   - **C. Every 60 minutes**
   - **D. Every 5 minutes**

4. **Which of the following is a factor you should know about a structural collapse?**
   - **A. Weather forecast**
   - **B. Color of walls**
   - **C. Structure type**
   - **D. Owner's name**

5. **What is the greatest concern for rescuers during a structural collapse?**
   - **A. Partially collapsed structures**
   - **B. Falling debris**
   - **C. Fire spread**
   - **D. Gas leaks**

6. Cleaning or repairing assigned personnel protective equipment should be done according to whose recommendations?

A. OSHA

B. NFPA

C. ISO

D. Manufacturers

7. What tool is well suited for cutting through heavy metal structures, and is used primarily to cut steel reinforcing plates, beams and cables?

A. Saws

B. Torches

C. Angle grinders

D. Plasma cutters

8. In precast construction, the principal failure is due to the weakness of the connectors used to connect building parts; the weak connectors fail which creates many falling hazards as precast sections break loose and become unstable.

A. Weak Connectors Between Building Parts

B. Wind Loads

C. Seismic Activity

D. Water Infiltration

9. Should you cut post tension cables?

A. Yes

B. Only with written authorization

C. No

D. Only in an emergency

10. OSHA 29 CFR 1910.269: What is the crane minimum clearance distance from power lines?

A. Crane minimum clearance distance of 10 feet from power lines

B. Crane minimum clearance distance of 5 feet from power lines

C. Crane minimum clearance distance of 15 feet from power lines

D. Crane minimum clearance distance of 20 feet from power lines

Answers

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

Explanations

1. In breaching operations, which is a hazard related to moving loads?

A. Movement of large weights

B. Weather delays

C. Paperwork

D. Etiquette

The main idea is that moving loads pose a dynamic, physical hazard during breaching. When a breach is created or supports are altered, heavy elements—such as concrete slabs, beams, or accumulated debris—can shift, slide, or drop unexpectedly. This movement can injure nearby team members, trap them, or trigger additional collapse, especially if loads were previously restrained or balanced by the surrounding structure. Because breaching changes the stability of the environment, the risk isn't about weather, paperwork, or etiquette—those are administrative or environmental factors. The key safety focus is preventing uncontrolled movement of heavy loads by securing and controlling them with proper rigging, shoring, tag lines, and clear team coordination before advancing.

2. The time of the day is a critical factor when combined with the occupancy type to help determine number of potential victims.

A. Weather

B. Season

C. Daylight

D. Time

Time is the factor that links occupancy type with how many people are likely inside a structure at a given moment. Different occupancies have characteristic patterns of activity that vary with the hour, so the time of day directly changes the expected number of potential victims. For example, a school is crowded during class hours but much less so during holidays or after dismissal; a shopping center sees peaks around lunch and after work; offices are busiest during typical business hours; a residential building has more occupants in the morning and evening. Knowing the time of day allows you to estimate how many people might be present and prioritize search and rescue accordingly. Daylight can affect visibility, but it doesn't tell you how many people are inside as directly as the hour does. Weather and season influence some external factors but are less tied to occupancy patterns at the incident moment.

3. How often should you rotate teams during operations?

A. Every 2 hours

B. Every 15-30 minutes

C. Every 60 minutes

D. Every 5 minutes

Maintaining safety and performance in hazardous environments relies on timely team rotations to prevent fatigue and loss of situational awareness. In structure collapse operations, crews face shifting hazards, limited air, and intense physical demands. Turning teams over every 15 to 30 minutes keeps at least one team fresh enough to continue critical tasks, perform quick hazard assessments, and uphold communication and coordination with the rest of the crew. This interval also fits with rehab needs—water, rest, hydration, and equipment checks—without sacrificing progress. Rotating too infrequently (like every hour or more) allows fatigue to erode decision-making and stability, while rotating too often (every few minutes) disrupts continuity and productivity. So, a 15- to 30-minute cycle strikes the right balance between safety and mission advancement.

4. Which of the following is a factor you should know about a structural collapse?

A. Weather forecast

B. Color of walls

C. Structure type

D. Owner's name

Knowing the structure type is essential because it informs how a building is likely to fail, what stabilization methods will be effective, and where to position crews and equipment. Different construction types—wood-frame, masonry, concrete, or steel—have distinct failure modes, load paths, and shoring needs. By identifying the type early, you can anticipate hazards such as progressive collapse, hidden voids, or brittle joint failures and tailor your stabilization and entry plan accordingly. Weather, wall color, or ownership do not influence how a collapse behaves or how you should respond, so they aren't the factors you rely on for assessing collapse behavior.

5. What is the greatest concern for rescuers during a structural collapse?

A. Partially collapsed structures

B. Falling debris

C. Fire spread

D. Gas leaks

Unstable, partially collapsed structures create the greatest risk because the remaining building integrity is unpredictable and can fail without warning. A partially collapsed area can shift, settle, or give way as loads are redistributed, equipment is moved, or vibrations travel through the debris. That means a new collapse can trap or injure both victims and rescuers and can quickly close off access routes that were thought safe. Because this risk can escalate suddenly, the focus in US&R is on stabilization, shoring, and establishing a clear collapse zone, then proceeding with cautious, planned access. Other hazards like falling debris, fire spread, and gas leaks are serious and must be managed, but they tend to be secondary to the inherent danger of ongoing structural instability.

6. Cleaning or repairing assigned personnel protective equipment should be done according to whose recommendations?

A. OSHA

B. NFPA

C. ISO

D. Manufacturers

Cleaning or repairing assigned PPE should follow the manufacturer's recommendations because each piece is built with specific materials, coatings, and construction that respond to particular cleaners, solvents, and repair methods. The manufacturer knows exactly how their product performs and how its protective features—such as barrier fabrics, seals, foams, and attachments—will be affected by cleaning processes and repair procedures. Using the prescribed methods helps preserve the equipment's protective performance, maintains fit and function, and keeps warranties and any certifications valid. General safety standards from OSHA, NFPA, or ISO provide broad requirements and performance criteria, but they don't cover the product-specific cleaning and repair steps for every item. Those standards guide overall program safety and minimum maintenance expectations, while the manufacturer supplies the exact, app-specific instructions needed to avoid degrading the PPE.

7. What tool is well suited for cutting through heavy metal structures, and is used primarily to cut steel reinforcing plates, beams and cables?

A. Saws

B. Torches

C. Angle grinders

D. Plasma cutters

In heavy metal cutting within collapse scenes, you need a tool that can handle thick, tough steel and irregular, obstructed work areas. An oxy-fuel torch is well suited for this because it can cut through thick structural steel, reinforcing plates, beams, and even cables by heating and oxidizing the metal to form a cut edge. It's portable, doesn't rely on electrical power, and can reach into tight or cluttered spaces where other tools struggle. Saws, while versatile, aren't efficient for deep cuts in very thick metal and blades wear quickly against heavy structural steel. Angle grinders are great for smaller, thinner cuts and shaping, but they become impractical for large beams or thick plates due to time, heat buildup, and fatigue. Plasma cutters cut quickly on thinner to mid-thickness metal and require a power source; they can struggle with very thick sections and with dirty, obstructed work areas common in collapses. So, for cutting through heavy metal structures such as reinforcing plates, beams, and cables, the torch stands out as the most effective option.

8. In precast construction, the principal failure is due to the weakness of the connectors used to connect building parts; the weak connectors fail which creates many falling hazards as precast sections break loose and become unstable.

A. Weak Connectors Between Building Parts

B. Wind Loads

C. Seismic Activity

D. Water Infiltration

In precast construction, building parts are connected by connectors that transfer loads and keep panels aligned. If those connectors are weak or poorly designed, they fail under the loads the structure experiences, causing precast sections to separate or detach. When connections give way, gravity and lateral forces can cause panels to shift, break loose, and fall, creating multiple falling hazards. Wind and seismic loads are important design considerations and can stress connections, but the scenario describes the primary problem as the inherent weakness of the connectors themselves, which directly leads to panels coming apart. Water infiltration can contribute to deterioration over time by corroding or weakening connectors, but it is the inadequate connector strength that initiates the hazardous failure.

9. Should you cut post tension cables?

A. Yes

B. Only with written authorization

C. No

D. Only in an emergency

Post-tension cables store large tensile energy to keep concrete members in compression. Cutting them releases that energy suddenly, which can cause rapid cracking, spalling, or even collapse, and can send tendons snapping with dangerous force. Because of this, there isn't a safe general rule to cut them during rescue work—the action must only be done under a controlled de-tensioning plan directed by qualified structural engineers. In an emergency, prioritize stabilization and safe access and avoid cutting prestressing tendons unless a formal plan and proper professionals are involved.

10. OSHA 29 CFR 1910.269: What is the crane minimum clearance distance from power lines?

A. Crane minimum clearance distance of 10 feet from power lines

B. Crane minimum clearance distance of 5 feet from power lines

C. Crane minimum clearance distance of 15 feet from power lines

D. Crane minimum clearance distance of 20 feet from power lines

The essential point is maintaining a safe clearance from energized power lines to prevent electric shock or arcing during crane operations. OSHA 29 CFR 1910.269 sets a baseline minimum clearance of 10 feet from overhead lines energized parts for crane work near typical distribution lines (up to about 50 kV). This 10-foot distance accounts for crane movement, sway, and potential contact with the line, providing a practical margin for operator reaction and load handling. If you know the line voltage is higher, the required clearance increases accordingly. For example, 15 feet is specified for lines in the 50–200 kV range, and about 20 feet for voltages in the 200–350 kV range. In everyday crane work near standard distribution lines, 10 feet is the general minimum to follow, with greater distances used for higher voltage scenarios. So the 10-foot minimum is the best-supported baseline answer, reflecting the fundamental safety standard for most crane operations near power lines. Always verify the exact distance in the applicable table for the line voltage at hand and use additional precautions such as spotters, de-energizing lines when possible, or employing passive barriers if needed.

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://usrstructuralcollapse2adv.examzify.com

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