

# Ohio Electrical Contractor NEC Code and Safety Standards Practice Test (Sample)

## Study Guide



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

**Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.**

**ALL RIGHTS RESERVED.**

**No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.**

**Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.**

**SAMPLE**

# Table of Contents

**Copyright** ..... 1

**Table of Contents** ..... 2

**Introduction** ..... 3

**How to Use This Guide** ..... 4

**Questions** ..... 5

**Answers** ..... 8

**Explanations** ..... 10

**Next Steps** ..... 16

SAMPLE

# 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

SAMPLE

- 1. Which table is appropriate for calculating receptacle loads for a health care facility?**
  - A. Table 210.11**
  - B. Table 220.42(A)**
  - C. Table 310.16**
  - D. Table 430.22**
  
- 2. Where should the disconnects for the grounded conductor typically be situated?**
  - A. At the main entry panel**
  - B. In a residential garage**
  - C. In a multisection switchboard or switchgear**
  - D. Close to the load**
  
- 3. At what percentage of the total connected load should fixed electric space-heating loads be calculated?**
  - A. 50%**
  - B. 75%**
  - C. 100%**
  - D. 125%**
  
- 4. What is the minimum vertical rise for work space above energized parts?**
  - A. 4 feet**
  - B. 5 feet**
  - C. 6 feet**
  - D. 7 feet**
  
- 5. Should ventilation to open air of manholes, tunnels, and vaults occur wherever practical?**
  - A. Yes**
  - B. No**
  - C. Only in high-temperature areas**
  - D. Only during maintenance**

- 6. Where can listings for specific-purpose branch circuits be found if not referenced in certain chapters?**
- A. In Article 200**
  - B. In Article 210 or Table 210.3**
  - C. In Section 7.5**
  - D. In Chapter 10**
- 7. If a disconnecting means is obvious in purpose, is it still necessary to mark it?**
- A. No, marking is unnecessary**
  - B. Yes**
  - C. Only if it's in a public area**
  - D. Yes, unless it is a circuit breaker**
- 8. Is AFCI protection required for an individual branch circuit to a fire alarm system?**
- A. Yes**
  - B. No**
  - C. Only if specified by local code**
  - D. Only for commercial systems**
- 9. What requirement applies to electrical equipment with bare terminals?**
- A. Must be marked with warning signs**
  - B. An enclosure will be required to prevent accidental contact**
  - C. Must be grounded properly**
  - D. Must be placed in a separate room**
- 10. Which areas require at least one wall switch-controlled lighting outlet?**
- A. Hallways and stairways only**
  - B. Every habitable room only**
  - C. All habitable spaces**
  - D. Only bathrooms and garages**

## Answers

SAMPLE

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

SAMPLE

## **Explanations**

SAMPLE

**1. Which table is appropriate for calculating receptacle loads for a health care facility?**

- A. Table 210.11
- B. Table 220.42(A)**
- C. Table 310.16
- D. Table 430.22

The appropriate table for calculating receptacle loads for a health care facility is Table 220.42(A). This table specifically addresses general load calculations for dwelling units and non-dwelling unit receptacle loads, including those found in health care facilities. The NEC (National Electrical Code) recognizes that receptacles in health care environments must be planned and installed with careful consideration of their intended use, load demand, and applicable safety standards. Health care facilities often have specific requirements due to the nature of the equipment used and the critical need for continuous operation. Table 220.42(A) provides the necessary guidelines for determining loads based on the number of receptacles, which is essential for ensuring that the electrical service can adequately support the equipment without risk of overload or failure. Tables like 210.11 relate more to branch circuit requirements, while Table 310.16 deals with conductors' ampacity, and Table 430.22 pertains to motor circuits. These tables are important in their contexts but do not apply directly to calculating receptacle loads in health care settings.

**2. Where should the disconnects for the grounded conductor typically be situated?**

- A. At the main entry panel
- B. In a residential garage
- C. In a multisection switchboard or switchgear**
- D. Close to the load

The appropriate location for disconnects for the grounded conductor is typically within multisection switchboards or switchgear. This allows for effective management of electrical systems by providing clear access to disconnects, ensuring they are easily reachable while maintaining safety standards. Having the disconnects in this location promotes improved operational safety and efficiency, as it enables the service personnel to quickly and effectively isolate electrical components for maintenance or during an emergency situation. Multisection switchboards are designed to accommodate various electrical devices, making them a practical choice for placing disconnects where they can serve multiple circuits. In contrast, placing the disconnects at the main entry panel, in a residential garage, or close to the load can complicate access and might not comply with the regulations laid out in the NEC. Disconnects in these positions may not provide the adequate protection or rapid response required during an electrical fault, which is why the best practice is to place them within specialized equipment like switchboards or switchgear.

**3. At what percentage of the total connected load should fixed electric space-heating loads be calculated?**

- A. 50%
- B. 75%
- C. 100%**
- D. 125%

Fixed electric space-heating loads should be calculated at 100% of the total connected load. This is because space-heating systems are essential for maintaining a comfortable environment, and their full capacity must be considered to ensure that the electrical system can handle the maximum demand during peak heating times. Calculating at 100% allows for accurate load management and ensures that the electrical infrastructure is appropriately sized to prevent overloads, ensuring safety and efficiency. Calculating fixed space-heating loads at a lower percentage could lead to underestimating the load during critical periods, potentially risking system performance and safety. Thus, adhering to the 100% calculation is a standard method outlined in the National Electrical Code (NEC) for ensuring that all heating systems operate effectively without compromising safety or reliability.

**4. What is the minimum vertical rise for work space above energized parts?**

- A. 4 feet
- B. 5 feet**
- C. 6 feet
- D. 7 feet

The minimum vertical rise for work space above energized parts is essential for ensuring safety during electrical work. A vertical space of 5 feet is the standard requirement to provide adequate clearance for personnel working around energized components. This height helps to reduce the risk of accidental contact with live parts and allows technicians to operate safely without the risk of coming into contact with potential hazards. Having this minimum clearance also facilitates the use of appropriate tools and equipment, ensuring that workers remain at a safe distance from energized conductors and devices. This regulation emphasizes a precautionary approach to handling electrical installations, ultimately contributing to safer working conditions in environments involving electrical systems. Other heights such as 4, 6, or 7 feet may not meet the established safety guidelines that the National Electrical Code (NEC) specifies, which are designed to protect workers from electrical hazards.

**5. Should ventilation to open air of manholes, tunnels, and vaults occur wherever practical?**

**A. Yes**

**B. No**

**C. Only in high-temperature areas**

**D. Only during maintenance**

Ventilation to open air of manholes, tunnels, and vaults is essential for maintaining safety and health standards within these confined spaces. The correct answer is rooted in the need to ensure adequate airflow, which helps to prevent the accumulation of harmful gases, control temperature rises, and facilitate the exchange of fresh air. Open air ventilation reduces the risk of asphyxiation, explosion, and heat-related illnesses that can arise from poor air quality and oxygen deficiency. This practice is vital not only for the safety of workers who may need to enter these spaces but also for the effective operation and longevity of the equipment and systems housed within them. While there may be specific scenarios where ventilation might not be implemented, such as during certain types of maintenance or in extreme temperatures, focusing solely on those circumstances can compromise overall safety. Therefore, ensuring ventilation wherever practical is a fundamental safety standard in the industry.

**6. Where can listings for specific-purpose branch circuits be found if not referenced in certain chapters?**

**A. In Article 200**

**B. In Article 210 or Table 210.3**

**C. In Section 7.5**

**D. In Chapter 10**

The reference to specific-purpose branch circuits can be found in Article 210 of the National Electrical Code (NEC), which outlines branch circuit design and specific requirements. Within this article, Table 210.3 provides essential information regarding branch circuits, including the types of loads they are intended to serve, the permissible ampacity, and other critical factors that relate to the installation of these branch circuits. This is vital for ensuring compliance with safety standards and proper performance for specific applications, as specific-purpose branch circuits may have unique requirements based on their intended use. Article 210's guidelines are tailored to enhance safety and reliability in electrical installations, making it the correct reference for this context. Other articles or sections mentioned do not directly address the listings for specific-purpose branch circuits or provide the same level of detail necessary for understanding their application and requirements.

**7. If a disconnecting means is obvious in purpose, is it still necessary to mark it?**

- A. No, marking is unnecessary**
- B. Yes**
- C. Only if it's in a public area**
- D. Yes, unless it is a circuit breaker**

Marking a disconnecting means, even if its purpose is obvious, is crucial for ensuring clarity and safety in electrical installations. The National Electrical Code (NEC) emphasizes the importance of proper identification of disconnects to prevent unintended operation or confusion, particularly during emergency situations or maintenance. The markings serve several purposes: they inform personnel of the specific function of the disconnect, indicate whether it is safe to work on a system, and help to prevent accidental disconnecting of critical equipment. Having clear and visible markings contributes to overall electrical safety practices and compliance with safety standards, allowing for quick identification of equipment during emergencies or routine maintenance by various individuals who may not be intimately familiar with the system in question. Aside from safety and clarity, even if the disconnecting means seems obvious, the marking also adheres to regulatory requirements set forth in the NEC and other safety standards that mandate proper signage and labeling in electrical installations.

**8. Is AFCI protection required for an individual branch circuit to a fire alarm system?**

- A. Yes**
- B. No**
- C. Only if specified by local code**
- D. Only for commercial systems**

AFCI (Arc-Fault Circuit Interrupter) protection is an important safety feature in electrical installations that help prevent electrical fires caused by arc faults. The requirements can be influenced by the National Electrical Code (NEC) as well as local regulations. Regarding fire alarm systems, AFCI protection is typically required for circuits serving dwelling units, which includes circuits that supply power to fire alarm systems. This is in alignment with the NEC's approach to enhancing safety in residential settings by mitigating risks related to arcing, which could lead to fires. By ensuring that circuits for fire alarms are protected by AFCIs, it helps to ensure that these critical safety systems remain operational during potential electrical failures, contributing to overall safety for occupants and property. Thus, the answer to whether AFCI protection is required for a branch circuit to a fire alarm system is indeed affirmative, as the intention is to maintain high safety standards in residential electrical systems.

**9. What requirement applies to electrical equipment with bare terminals?**

- A. Must be marked with warning signs
- B. An enclosure will be required to prevent accidental contact**
- C. Must be grounded properly
- D. Must be placed in a separate room

Electrical equipment that has bare terminals poses a risk of accidental contact, which can lead to electric shock or other hazards. To mitigate this risk, the requirement for an enclosure is essential. An enclosure serves as a protective barrier, preventing unauthorized or accidental access to the bare terminals. This is particularly important in environments where personnel may come into contact with or work near the equipment. By enclosing the terminals, the likelihood of someone inadvertently touching the live parts is significantly reduced, promoting safety compliance with the NEC (National Electrical Code) standards. Proper enclosures also help protect the equipment from dust, moisture, and other environmental factors, which can degrade performance and safety over time. Thus, implementing an enclosure for electrical equipment with bare terminals is a crucial safety measure.

**10. Which areas require at least one wall switch-controlled lighting outlet?**

- A. Hallways and stairways only
- B. Every habitable room only
- C. All habitable spaces**
- D. Only bathrooms and garages

The requirement for at least one wall switch-controlled lighting outlet in all habitable spaces stems from the National Electrical Code (NEC) guidelines, which aim to enhance safety and convenience in residential and commercial environments. Habitable spaces include areas such as living rooms, bedrooms, kitchens, hallways, and any other space designed for human occupancy. Ensuring that these areas are equipped with switch-controlled lighting allows occupants to easily access light without needing to navigate in the dark, thus reducing the risk of accidents or falls. By mandating this feature in all habitable spaces, the code promotes a higher standard of living and safety, considering that these are the areas in which people spend most of their time. The inclusion of hallways and stairways in this requirement provides additional safety as these transitional spaces can be particularly hazardous without proper illumination. This standard reinforces the principle of convenience in daily living as well. By ensuring that adequate lighting is readily available in all areas where individuals might be present, the NEC aims to foster an environment where safety and accessibility are prioritized.

## 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](mailto:hello@examzify.com).**

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

**<https://ohelectricalcontractorcodesafety.examzify.com>**

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

SAMPLE