General Contractor Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. According to the American Public Works Association, what does the color pink signify when marking utility locations?

A. Excavation

B. Temporary survey markings

C. Permanently marked utilities

D. Danger zones

2. What is the maximum allowable size of a bed joint in a masonry wall placed directly on the foundation?

A. 1/2 inch

B. 5/8 inch

C. 3/4 inch

D. 1 inch

3. What is the minimum height required between finished floor and joist in a kitchen?

A. 6 FT

B. 7 FT

C. 8 FT

D. 9 FT

4. What minimum temperature must concrete be maintained to prevent damage from marginal freezing?

A. 40 degrees

B. 50 degrees

C. 60 degrees

D. 70 degrees

5. What is the minimum width requirement for a vestibule according to UBC?

A. 30 inches

B. 44 inches

C. 60 inches

D. 48 inches

6. What is the minimum acceptable concrete cover over reinforcement for concrete exposed to earth?

A. 2 inches

B. 3 inches

C. 4 inches

D. 5 inches

7. When using steel banding as a guardrail on scaffolding, how should it be utilized?

A. As a toprail or midrail

B. As a base support

C. Steel banding should not be used as a toprail or midrail

D. For securing materials only

8. How many types of shingle ratings exist?

A. 1

B. 2

C. 3

D. 4

9. When is a hub used in surveying?

A. Raising the transit level

B. Trimming to a close tolerance

C. Marking boundaries

D. Calculating distances

10. What is the function of a vapor barrier in construction?

A. To provide insulation

B. To allow moisture to vent

C. To prevent moisture from entering a building

D. To strengthen structural elements

Answers

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

Explanations

1. According to the American Public Works Association, what does the color pink signify when marking utility locations?

A. Excavation

B. Temporary survey markings

C. Permanently marked utilities

D. Danger zones

The correct designation for the color pink in utility marking, as per the standards set by the American Public Works Association (APWA), is for temporary survey markings. This indicates that the area has been surveyed to gather information or set up for potential construction activities, but it does not imply anything permanent about the utilities present. Pink is used specifically to help guide projects during initial stages, allowing workers to identify locations for further exploration or work without suggesting that these markings denote existing utilities or their permanent configurations. In contrast, other colors signify different aspects related to utility locations and safety. For example, colors like red or yellow would indicate live utilities or potential hazards, which is distinct from what pink represents in this context. Understanding this color designation can significantly aid in project planning and execution, ensuring safety and compliance with local regulations.

2. What is the maximum allowable size of a bed joint in a masonry wall placed directly on the foundation?

A. 1/2 inch

B. 5/8 inch

C. 3/4 inch

D. 1 inch

The maximum allowable size of a bed joint in a masonry wall placed directly on the foundation is established to ensure stability and structural integrity. A bed joint refers to the horizontal layer of mortar between masonry units. A bed joint size of 5/8 inch is often specified as optimal because it balances the need for sufficient mortar to bond the masonry units while also minimizing excessive joint size that could lead to structural weaknesses or issues with moisture penetration. In masonry construction, maintaining consistent joint sizes is crucial for ensuring even distribution of loads throughout the wall. A joint that is too thick may result in settlement issues or variations in the wall's alignment over time. This is especially important when the wall is placed directly on the foundation, as any inconsistencies can be exacerbated by the weight of the structure above. Other options present sizes that exceed the common specifications for bed joints, which could compromise the solidity and reliability of the masonry structure.

3. What is the minimum height required between finished floor and joist in a kitchen?

A. 6 FT

B. 7 FT

C. 8 FT

D. 9 FT

In residential construction, the minimum ceiling height for habitable spaces, including kitchens, is generally established by building codes to ensure adequate space for occupants and to promote safety. The typical requirement is at least 7 feet between the finished floor and the lowest point of any structural component, such as joists. This height allows for comfortable movement within the space and accommodates standard kitchen fixtures and cabinetry without causing issues with headroom. Ceiling height under 7 feet can lead to a cramped feeling and may violate local building code requirements, which is why this specific measurement is significant. It ensures that kitchens, a space where people often stand and perform tasks, has enough overhead clearance for functionality and safety.

4. What minimum temperature must concrete be maintained to prevent damage from marginal freezing?

A. 40 degrees

B. 50 degrees

C. 60 degrees

D. 70 degrees

To prevent damage to concrete from marginal freezing, it is important to ensure that the temperature of the concrete is maintained at a minimum level that allows for proper hydration and curing. The minimum temperature of 50 degrees Fahrenheit is typically recommended for fresh concrete. At this temperature, the risk of freezing is significantly reduced, enabling the concrete to set properly and gain adequate strength. If the temperature falls below this threshold, the hydration process can be disrupted, leading to incomplete strength development and potential cracking or other forms of damage. Different factors like wind, sun exposure, and the specific mix design can affect this threshold, but the consensus for practical applications is that maintaining a temperature of at least 50 degrees is crucial for ensuring structural integrity during the critical early stages of curing.

5. What is the minimum width requirement for a vestibule according to UBC?

A. 30 inches

B. 44 inches

C. 60 inches

D. 48 inches

The minimum width requirement for a vestibule according to the Uniform Building Code (UBC) is 44 inches. This dimension is established to ensure that the vestibule can accommodate the safe and comfortable movement of individuals, particularly in situations where a building's entrance serves as a transition space between the outside environment and the interior. Vestibules play a crucial role in energy efficiency and air quality, helping to minimize the infiltration of outside air while allowing people to enter and exit freely. A width of 44 inches ensures that the vestibule is sufficiently spacious, enabling multiple people to use the space simultaneously, which is particularly important in commercial or public buildings. It also facilitates accessibility, compliant with regulations that support individuals with disabilities. The other dimensions are either too wide or too narrow for standard requirements. For instance, while 30 inches might seem adequate for pedestrian access, it does not accommodate the needs of larger groups or assistive devices efficiently. The dimensions of 60 inches and 48 inches exceed the minimum requirement and could be more appropriate for specific design purposes, but they are not the minimum as dictated by the code. The UBC has set the standard at 44 inches for optimal functionality and safety in vestibule design.

6. What is the minimum acceptable concrete cover over reinforcement for concrete exposed to earth?

A. 2 inches

B. 3 inches

C. 4 inches

D. 5 inches

The minimum acceptable concrete cover over reinforcement for concrete that is exposed to earth is typically set at a depth of 3 inches. This requirement is based on the need to protect the reinforcing steel from corrosion and physical damage, as soil conditions, moisture content, and the potential for chemicals in the ground can all contribute to the deterioration of the embedded steel over time. A cover of 3 inches provides sufficient protection to mitigate the effects of the surrounding environment, enhancing the durability and longevity of the concrete structure. This standard often aligns with guidelines provided in codes from organizations such as the American Concrete Institute (ACI) or other relevant building codes. While options that suggest a greater cover exist, they are generally associated with specific conditions or environments that may require additional protection, which is not necessary for typical earth-exposed concrete.

7. When using steel banding as a guardrail on scaffolding, how should it be utilized?

A. As a toprail or midrail

B. As a base support

C. Steel banding should not be used as a toprail or midrail

D. For securing materials only

Steel banding should not be used as a toprail or midrail because it does not meet the structural requirements and safety standards established for guardrails in scaffolding systems. Guardrails are designed to prevent falls and must be constructed from materials that can withstand certain loads; steel banding is typically not formulated for such uses and does not provide the necessary strength, durability, or rigidity required for effective fall protection. Using inappropriate materials like steel banding could lead to severe safety hazards, including the risk of falls, because they may fail under stress or during impact. The proper components for guardrails include designated toprails and midrails made from materials specifically intended for this application, ensuring that they can adequately protect workers by being both robust and reliable in their function.

8. How many types of shingle ratings exist?

A. 1

B. 2

C. 3

D. 4

The correct answer indicates that there are three types of shingle ratings. This classification is important for understanding the quality and performance characteristics of roofing shingles. The three types of shingle ratings generally include: 1. **Class A Rating: This is the highest rating indicating that the shingles offer a high level of resistance to fire. It means the shingles have undergone rigorous testing and can withstand severe exposure to fire originating from nearby structures or vegetation. 2. **Class B Rating**: This rating signifies moderate fire resistance. Shingles with a Class B rating are suitable for use in areas with a lower risk of fire exposure but do not provide the same level of protection as Class A shingles. 3. **Class C Rating**: This represents a lower level of fire resistance. Such shingles are typically used in areas where fire risk is minimal or where local building codes allow for lower-rated materials. Understanding these classifications helps contractors and builders select the appropriate materials based on fire safety standards, local building codes, and specific project requirements. Each rating reflects the material's performance characteristics, which can significantly influence safety and compliance in construction projects.**

9. When is a hub used in surveying?

A. Raising the transit level

B. Trimming to a close tolerance

C. Marking boundaries

D. Calculating distances

A hub is used in surveying primarily as a reference point for establishing control over the positioning of instruments and layout of measurements. When a surveyor is trimming to a close tolerance, they are focusing on precision and ensuring that their measurements meet specific standards. The hub serves as a stable, defined point around which careful measurements can be taken, allowing for adjustments and ensuring that the construction or layout aligns accurately with design specifications. In this context, while a hub can have applications in other areas of surveying, such as marking boundaries or assisting in calculations, its crucial role is most evident when precision is needed in aligning physical structures or performing close tolerance work. Each of the other functions, such as raising a transit level or calculating distances, may involve different tools or methods that do not rely as heavily on the hub's stability and precision in the same way.

10. What is the function of a vapor barrier in construction?

A. To provide insulation

B. To allow moisture to vent

C. To prevent moisture from entering a building

D. To strengthen structural elements

The function of a vapor barrier is to prevent moisture from entering a building. These barriers are crucial in maintaining the integrity of structures by controlling the movement of moisture through walls, floors, and ceilings. Moisture can lead to a range of issues, including mold growth, wood rot, and damage to insulation and other building materials. By incorporating a vapor barrier, builders create a shield that stops water vapor from passing through, especially in areas prone to high humidity or where moisture can seep into the building envelope. Insulation is a separate function involving thermal resistance that keeps buildings energy-efficient, while allowing moisture to vent would be contrary to the purpose of a vapor barrier, which seeks to contain moisture. Strengthening structural elements relates more to materials and design rather than moisture control, which is the primary focus of vapor barriers. Therefore, the primary and correct function of a vapor barrier is indeed to prevent moisture from entering a building.