C-17 Glazing Contractor Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. **According to building regulations, the maximum effort to open both interior and exterior doors in public buildings is limited to?**

   A. 10 lbs

   B. 5 lbs

   C. 7 lbs

   D. 15 lbs

2. **What should you avoid while installing a mirror to ensure it remains intact?**

   A. Heavy adhesive

   B. Excessive pressure

   C. Non-standard mounts

   D. Inappropriate tools

3. **What is the maximum effort required to open exterior doors in public buildings?**

   A. 8 lbs

   B. 5 lbs

   C. 10 lbs

   D. 12 lbs

4. **What type of window is commonly used for horizontal sliding mechanisms?**

   A. Double-hung window

   B. Casement window

   C. Horizontal-sliding window

   D. Fixed window

5. **What is the approximate area of a lite of glass measuring 42" x 62"?**

   A. 12 square feet

   B. 15 square feet

   C. 18 square feet

   D. 20 square feet

6. When specifying a kick plate, which measurement is typically recommended?

A. 8 inches

B. 10 inches

C. 12 inches

D. 14 inches

7. What type of products would solar control glazing primarily be used in?

A. Residential windows only

B. Automobiles and aircraft

C. Commercial buildings and large structures

D. Only in decorative applications

8. How does edge-gapped double-glazing improve thermal performance?

A. By sealing the edges tightly

B. By increasing air circulation between the panes

C. By creating a thermal barrier with a gap between the glass

D. By using thicker glass materials

9. What is the minimum width required for an opening in shower enclosures according to disabled-access regulations?

A. 30 inches

B. 36 inches

C. 32 inches

D. 28 inches

10. Which of the following is a typical type of glazing system used in commercial buildings?

A. Foundation walls

B. Roof trusses

C. Curtain walls

D. Load-bearing walls

Answers

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

Explanations

1. According to building regulations, the maximum effort to open both interior and exterior doors in public buildings is limited to?

A. 10 lbs

B. 5 lbs

C. 7 lbs

D. 15 lbs

The correct answer reflects building regulations that aim to ensure accessibility and ease of use for all individuals in public buildings. The limit of 5 pounds for the maximum effort to open both interior and exterior doors is established to accommodate people with varying levels of strength and mobility, aligning with accessibility standards such as the Americans with Disabilities Act (ADA). This regulation helps ensure that doorways can be easily navigated by individuals, including those using wheelchairs, walkers, or with limited upper body strength, thus promoting inclusivity in public spaces. By limiting the force required to 5 pounds, it reduces barriers and enhances safety and comfort for all users in public environments.

2. What should you avoid while installing a mirror to ensure it remains intact?

A. Heavy adhesive

B. Excessive pressure

C. Non-standard mounts

D. Inappropriate tools

While installing a mirror, avoiding excessive pressure is crucial to ensuring the mirror remains intact. Applying too much pressure can lead to cracks or fractures, especially if the mirror is made of glass, which is more susceptible to breaking under stress. Mirrors should be handled gently; the pressure applied during installation should be controlled and consistent to prevent damage. When installing a mirror, it is important to use the right techniques and tools to support the mirror properly without forcing it into place. Handling the mirror with care and ensuring it is mounted securely without excessive pressure will extend its lifespan and maintain its integrity. Choosing appropriate adhesives, mounts, and tools can significantly contribute to a successful installation, but managing the pressure applied during the installation process is key to preventing damage.

3. What is the maximum effort required to open exterior doors in public buildings?

A. 8 lbs

B. 5 lbs

C. 10 lbs

D. 12 lbs

The maximum effort required to open exterior doors in public buildings is set at 5 pounds. This standard is defined by accessibility guidelines and building codes to ensure that doors are easily operable by individuals with disabilities, including those using mobility devices. The intent behind this limit is to promote accessibility and independence for all users, ensuring that doors can be opened with minimal physical strain. Factors such as door design, hardware, and the type of door mechanism all play a role in this requirement. By limiting the force needed to open these doors to 5 pounds, public buildings can accommodate a wider range of abilities, enhancing overall safety and usability. This standard reflects a commitment to inclusivity in public spaces, allowing everyone to access facilities without encountering barriers.

4. What type of window is commonly used for horizontal sliding mechanisms?

A. Double-hung window

B. Casement window

C. Horizontal-sliding window

D. Fixed window

Horizontal sliding windows are designed specifically to operate along a track mechanism, allowing them to open horizontally by sliding side to side. This type of window is characterized by its two or more sashes that can be moved left or right, providing ease of operation and adaptability for wider openings. In contrast, the other types of windows serve different functional designs. Double-hung windows are designed with two sashes that slide vertically. Casement windows are hinged on one side and open outwards with a crank mechanism. Fixed windows, as the name implies, are stationary and do not open at all. Thus, the unique design of horizontal sliding windows makes them the appropriate choice for operations requiring a horizontal mechanism.

5. What is the approximate area of a lite of glass measuring 42" x 62"?

A. 12 square feet

B. 15 square feet

C. 18 square feet

D. 20 square feet

To determine the area of a lite of glass that measures 42 inches by 62 inches, you can use the formula for the area of a rectangle, which is length multiplied by width. First, convert the measurements from inches to feet, since the answer options are in square feet. There are 12 inches in a foot, so: - 42 inches is equal to 42 ÷ 12 = 3.5 feet. - 62 inches is equal to 62 ÷ 12 = 5.1667 feet (approximately). Now multiply these two dimensions to find the area in square feet: Area = Length x Width Area = 3.5 feet x 5.1667 feet ≈ 18.06 square feet. When rounded to the nearest whole number, this result indicates that the area is approximately 18 square feet. This is why the correct answer is the one that corresponds to 18 square feet.

6. When specifying a kick plate, which measurement is typically recommended?

A. 8 inches

B. 10 inches

C. 12 inches

D. 14 inches

When specifying a kick plate, the recommendation for a 10-inch measurement is rooted in industry standards and practical functionality. A kick plate is installed at the bottom of a door to protect it from damage caused by foot traffic or equipment, and a 10-inch height provides an effective barrier against common wear and tear without being excessively high. This measurement allows for adequate coverage while also maintaining a visually appealing proportion that is not overly bulky. In practical use, the 10-inch height is designed to strike a balance between functionality and aesthetics, ensuring that it is sufficient to protect the door from scuffs and dents while not obscuring the door's lower trim or lowering the visual line of sight. It is also a common practice in commercial settings where high traffic is expected, helping to extend the life of the door and maintain a clean appearance. The other options, while they may be appropriate in specific scenarios, do not reflect the standard and commonly accepted height that balances protection with design. Therefore, 10 inches is widely recognized as the most effective and practical measurement for kick plates in both commercial and residential applications.

7. What type of products would solar control glazing primarily be used in?

A. Residential windows only

B. Automobiles and aircraft

C. Commercial buildings and large structures

D. Only in decorative applications

Solar control glazing is specifically designed to manage the amount of solar radiation that enters a building. This type of glazing typically incorporates technologies such as reflective coatings, tints, or integrated shading systems to reduce heat gain and glare, making it especially beneficial in commercial buildings and large structures where energy efficiency and occupant comfort are paramount. The use of solar control glazing in commercial settings allows for better climate control, reducing reliance on air conditioning, and ultimately leading to energy savings. These buildings often have larger glass surfaces, which can significantly enhance the performance of solar control glazing compared to smaller applications. While solar control glazing could potentially be used in residential windows and other applications like automobiles or decorative elements, its primary value lies in the larger-scale application where heat management and energy efficiency have more pronounced effects, thus making it ideal for commercial buildings and large structures.

8. How does edge-gapped double-glazing improve thermal performance?

A. By sealing the edges tightly

B. By increasing air circulation between the panes

C. By creating a thermal barrier with a gap between the glass

D. By using thicker glass materials

Edge-gapped double-glazing improves thermal performance primarily by creating a thermal barrier with a gap between the glass panes. This design establishes an insulating layer of air (or inert gas, in some cases) between the two panes of glass. The gap acts as a thermal break, reducing the amount of heat transfer that occurs through conduction. When the gap is properly sized, it minimizes convection currents and helps to trap heat, effectively keeping warmer air inside during colder months and preventing heat from entering in warmer months. The effectiveness of this thermal barrier is influenced by the width of the gap and the type of gas used, as different gases can enhance insulation properties further than air alone. The other options suggest approaches that do not fundamentally enhance the thermal barrier's effectiveness. For instance, sealing edges tightly does prevent air infiltration but does not create the necessary thermal break. Increasing air circulation between the panes could actually cause energy loss rather than conserve heat. Lastly, thicker glass materials would provide some benefits in terms of sound insulation or strength, but it does not inherently improve thermal performance as effectively as the gap creates.

9. What is the minimum width required for an opening in shower enclosures according to disabled-access regulations?

A. 30 inches

B. 36 inches

C. 32 inches

D. 28 inches

The minimum width required for an opening in shower enclosures according to disabled-access regulations is 36 inches. This dimension is established to ensure that individuals with disabilities, including those in wheelchairs, can access the shower area comfortably and safely. A width of 36 inches allows sufficient space for maneuvering, which is critical for maintaining independence and ensuring accessibility in bathroom facilities. Compliance with this regulation is essential for creating inclusive environments that accommodate the needs of all users, particularly in public facilities and newly constructed residential buildings. Other widths, such as 30 inches, 32 inches, or 28 inches, do not meet these essential accessibility standards and may pose challenges for individuals needing assistance or mobility aids. Thus, the 36-inch width serves as the minimum requirement to promote accessibility and safety in shower enclosures.

10. Which of the following is a typical type of glazing system used in commercial buildings?

A. Foundation walls

B. Roof trusses

C. Curtain walls

D. Load-bearing walls

A typical type of glazing system used in commercial buildings is the curtain wall. Curtain walls are non-structural exterior walls that are designed to allow for a large amount of glass to be incorporated into the facade of a building. This allows for natural lighting, which can enhance the aesthetic appeal of the structure and contribute to energy efficiency by reducing the need for artificial lighting during the day. Curtain walls are usually made of lightweight materials, such as aluminum frames with glass panes, which makes them suitable for high-rise buildings where minimizing weight is crucial. They do not carry any structural load from the building except their own weight and wind loads, thus allowing for flexible design choices in the overall architecture of the building. Other options like foundation walls, roof trusses, and load-bearing walls serve very different functions in the structure of a building. Foundation walls provide stability and support to the building, roof trusses are components that support the roof, and load-bearing walls are integral to the building's structural integrity. These options do not incorporate glazing systems in the same way that curtain walls do.