

Final Exam

1. _____ to obtain _____ must be met before the design of any railing system is complete.
 - a. A completed budget, funding
 - b. Code compliance, regulatory approval
 - c. Committee review, tenant sign-off
 - d. None of the above
2. The Americans with Disabilities Act is a _____.
 - a. Civil law containing stringent regulations
 - b. Contains recommendations to accommodate handicapped users
 - c. Is not actually a building code per se
 - d. All of the above
3. As an example of the need to verify codes being enforced in a jurisdiction, the current New York City Building Code is the ____ version of the IBC.
 - a. 2012
 - b. 2018
 - c. 2014
 - d. None of the above
4. Some jurisdictions contain loading requirements that railings must resist when applied _____.
 - a. Upward, downward, and horizontally
 - b. Upward and downward
 - c. Horizontally at post connections
 - d. During pull-out tests.
5. An allowable stress increase of 1/3 for railing components was eliminated from some codes due to the increasing _____.
 - a. Importing of inferior metals
 - b. Amount of successful litigation
 - c. Lack of trained welders
 - d. Use of load factor design
6. Documents guiding the physical creation and installation of products are called _____.
 - a. Prototypes
 - b. Mock-ups
 - c. Assembly guides
 - d. Shop drawings

7. Stamped calculations accompanying railings assure the building designer that the railings comply with _____ .
 - a. The designer's drawings
 - b. The client's design parameters
 - c. Applicable codes
 - d. Pull-out test results

8. The term "functional art" refers to custom infill panels typically cut with a _____ .
 - a. Laser
 - b. Water-jet
 - c. Stamp press
 - d. Scroll saw

9. Engineering calculations establishing compliance by a railing manufacturer are best when provided by _____ .
 - a. An in-house engineer
 - b. The project architects
 - c. Outside engineering firms
 - d. The shop supervisor

10. Continual handling and the oils on people's hands results in well-handled stainless steel _____ .
 - a. Becoming self-polishing
 - b. Acquiring a fine patina
 - c. Becoming extremely slippery
 - d. Etched at the welds

11. The primary reason stainless steel railings are not used more often is _____ .
 - a. Weld failure
 - b. They become slippery when wet
 - c. Limited finish options
 - d. Expense

12. One major advantage to the use of composite railings is their _____ .
 - a. Warm feel when touched
 - b. Many styles and options
 - c. Many awards they have won
 - d. Brand recognition with realtors

13. LED lights can be integrated into capped composite railing systems _____ .
 - a. In tube configuration
 - b. At post bases, tops, and in nearby yards
 - c. On posts, under post caps, and under railings
 - d. Only on custom components

14. Once installed, aluminum railings be expected to last _____ years.
- 25-28
 - 70-90
 - 25-30
 - 40-50
15. A much wider variety of stock sizes and shapes are available in _____ than in _____.
- Wood, aluminum
 - Aluminum, steel
 - Bronze, steel
 - Glass, cable
16. Railing systems are available that mix components from more than one base material. One examples would be _____.
- Wood rails and porcelain infill
 - Aluminum rails and stainless-steel stiles
 - Composite rails and aluminum stiles
 - Bronze rails and wood X-panel infills
17. When the term “glass railings” is used, this is referring to _____ of glass.
- Infill panels
 - Spider stanchions
 - Top and bottom rails
 - All components
18. Laminated glass is multiple sheets of glass adhered to _____ between them.
- Argon
 - A transverse glass pane
 - Translucent glass
 - Plastic