

Quiz #10 - LEED Green Associate

GA02 – Pgs. 507-508 & 599-602

GA09 – Pgs. 107-139

GBLCC Section 4: Green Building Core Concepts and Application Strategies: Indoor Environmental Quality

1. The Indoor Environmental Quality (EQ) credit categories addresses which of these conditions inside a building?
  - A. Energy use, lighting, plug loads, HVAC efficiency
  - B. Building orientation, night venting, operable windows, environmental tobacco smoke
  - C. Air quality, lighting, acoustics, occupant experience
  - D. Lighting, acoustics, operable windows, HVAC efficiency
2. Building materials such as paints, adhesives, flooring, composite wood, insulation, wall materials, and furniture may emit which of these indoor air quality concerns?
  - A. Mold
  - B. VOCs
  - C. Methane
  - D. Radon
3. Which of these describes the rating used by LEED for Air Handling Unit (AHU) filters?
  - A. The higher the MERV rating the fewer the particulates captured by the filter.
  - B. The lower the MERV rating the greater the particulates captured by the filter.
  - C. The higher the MERV rating the greater the particulates captured by the filter.
  - D. A MERV of 8 is better than a MERV of 13 for capturing more particles in the air
4. Which of these strategies is the best way to prevent indoor pollutants?
  - A. Eliminate or control them at the sources
  - B. Install proper ventilation to remove any pollutants that enter
  - C. Reduce the use of adhesives and paints
  - D. Store cleaning products in a separate cabinet
5. What standard does LEED encourage projects to use to protect the indoor air quality during construction?
  - A. ASHRAE
  - B. Green Seal
  - C. SMACNA
  - D. IESNA
6. What standard is used by LEED to ensure that an adequate ventilation system is selected by the design team that will supply ample outside air to the occupants?
  - A. ASHRAE 90
  - B. ASHRAE 55
  - C. ASHRAE 52
  - D. ASHRAE 62
7. Which of these strategies would help in improving the indoor air quality during construction?
  - A. Keep employee break areas located outside the building
  - B. Keep the building clean during construction
  - C. Keep smoking to within 25 feet of the building
  - D. Keep the permanent air handling units running constantly

8. Which of these areas is considered a densely occupied space?
  - A. 15 people or more per 1000 square feet
  - B. 20 people or more per 1000 square feet
  - C. 25 people or more per 1000 square feet
  - D. 50 people or more per 1000 square feet
  
9. What is considered the breathing area inside a building?
  - A. 4 feet to 8 feet
  - B. 4 feet to 6 feet
  - C. 3 feet to 6 feet
  - D. 3 feet to 8 feet
  
10. Which of these are important aspects of the indoor experience?
  - A. Lighting levels and views to the outdoors
  - B. Furniture and partitions
  - C. Wall colors and diffusers
  - D. Task lights and thermostats
  
11. What are the units used to measure the incident luminous flux density on a differential element of surface located at a point and oriented in a particular direction?
  - A. Watts per square foot
  - B. Lumens per unit area
  - C. Spatial Daylight Autonomy (sDA)
  - D. Annual Sunlight Exposure (ASE)
  
12. What standard is used to define view factor?
  - A. ASHRAE
  - B. SMACNA
  - C. GreenScore
  - D. Heshong Mahone Group, Windows and Offices: A Study of Office Worker Performance and the Indoor Environment
  
13. Which of these strategies could be used to assess the satisfaction of the building occupants with the indoor environmental quality?
  - A. Wait for someone to complain
  - B. Conduct occupant surveys
  - C. Set all temperature controls to a constant value
  - D. If 20 people are satisfied, don't worry about it
  
14. For EQ Credit: Acoustic Performance which of these should be evaluated by the design team to see if sound reinforcement is needed?
  - A. Large conference rooms and auditoriums seating more than 50 persons
  - B. Lunch and break rooms seating more than 100 persons
  - C. Playgrounds
  - D. Large conference rooms and auditoriums seating more than 25 persons
  
15. What unit is used to measure HVAC background noise?
  - A. LUX
  - B. dBA
  - C. STC
  - D. Hz

16. What are the two options projects can use to earn EQ Credit: Indoor Air Quality Assessment?
- A. Bake-Out or Surveys
  - B. Flush-Out or Surveys
  - C. Bake-Out or Air Testing
  - D. Flush-Out or Air Testing
17. What should a Healthcare project do if a material being stored on-site and installed is damaged by moisture?
- A. Immediately burn the damaged material and replace with new, undamaged materials
  - B. Immediately report the incident to the moisture control officer and fine the contractor responsible
  - C. Immediately remove from site and properly dispose of any materials susceptible to microbial growth and replace with new, undamaged materials
  - D. Spray the product with mold kill and let it dry before installing it to avoid buying new material and increasing the project's cost
18. What is the intent of EQ Credit: Low Emitting Materials?
- A. To eliminate entirely the use of products that contain harmful VOCs.
  - B. To reduce concentrations of chemical contaminants that can damage air quality, human health, productivity, and the environment.
  - C. To reduce the amount of environmental tobacco smoke from entering the building.
  - D. To provide high-quality indoor environments for building occupants and increase worker productivity
19. What is the LEED standard for minimum indoor air quality?
- A. ASHRAE 90
  - B. ASHRAE 55
  - C. ASHRAE 62
  - D. SMACNA
20. What factors of thermal human comfort can a LEED design team provide individuals control of inside a building?
- A. Air temperature and humidity
  - B. Metabolism and clothing
  - C. Daylight and views
  - D. Acoustics and temperature