

Name: _____ UBC #: _____ Date: _____

ID: A

Basic Acoustical Ceilings Final Exam

True/False

Indicate whether the statement is true or false.

1. Cross tees are available in the same profiles as main beams, with a $1\frac{5}{16}$ " or $\frac{9}{16}$ " finish face being the most common.
2. A beam end retaining clip is a device attached to the end of a main beam or cross tee to hold the main beam or cross tee in place.
3. A single tee adapter clip is a U- or V-shaped channel designed to maintain cross tee spacing at the perimeter.
4. The only difference between a 2' x 2' grid pattern and a 2' x 4' grid pattern is that additional 2'-0" cross tees are installed at the mid-span of the 4'-0" cross tees.
5. With a 2' x 4' grid pattern, some cross tees run parallel to the main beams.
6. Unless specified otherwise by the architect, it is desirable to have the narrowest border possible in both directions.
7. With an acoustical ceiling, the orientation of the supporting members is based on the composition of the overhead structure.
8. The acoustical ceiling height for a room is typically shown on the reflected ceiling plan in an elliptical or boxed callout.
9. Regardless of the type of corner, the wall molding will have to be miter-cut to accommodate the angle.
10. Calculating the border tile dimensions indirectly locates the first node point, and the first hanger wire should typically be attached at the second node point—first node point plus 2'-0"—or the second cross tee location.
11. Two control lines are used with a suspended ceiling, and they are typically placed perpendicular to one another using the perimeter walls or structure as the measuring points.
12. A requirement of Seismic Design Category C is to maintain a minimum $\frac{3}{8}$ " clearance between the walls, tile, main beams, and cross tees.
13. Architects typically use a letter classification when numbering each individual sheet or print; for example, the sheets in an architectural section would be numbered as A-1, A-2, A-3, and so on.
14. Dimensions for acoustical ceilings can be given to a light fixture, a series of fixtures, or from the center of column lines.

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- _____ 15. Although engineered to withstand earthquakes in some instances, acoustical ceiling materials are fragile and should be handled carefully.

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- _____ 16. Which of the following is a metal clip that is riveted onto each end of the cross tee?
a. spacer
b. rout
c. reinforcing clip
d. staked-on tab
- _____ 17. Which of the following is a vertical slot on a main beam or cross tee?
a. spacer
b. rout
c. reinforcing clip
d. staked-on
- _____ 18. W-shaped molding that produces a reveal between the ceiling and the wall when fastened to the wall is _____.
a. shadow mold
b. F-mold
c. J-mold
d. reveal mold
- _____ 19. Which of the following is wire that has been embedded into the concrete deck above the acoustical ceiling?
a. seismic wire
b. perimeter
c. wire drop
d. direct connection
- _____ 20. Which of the following tiles are specialty tile designed to create a specific lighting effect?
a. luminous
b. metal
c. foam
d. mineral fiber
- _____ 21. Which of the following ratings measures the amount of noise a tile can absorb?
a. articulation class (AC)
b. ceiling attenuation class (CAC)
c. noise reduction coefficient (NRC)
d. direct noise articulation (DNA)
- _____ 22. Which of the following ratings measures the amount of sound passing through a panel?
a. articulation class (AC)
b. ceiling attenuation class (CAC)
c. noise reduction coefficient (NRC)
d. direct noise articulation (DNA)
- _____ 23. The three most common styles of tile are flush, reveal, and _____.
a. washable
b. tegular
c. Vector®
d. transitional
- _____ 24. Which of the following grid patterns is generally used as a basis for all other patterns?
a. diagonal
b. 2' x 2'
c. H-pattern
d. 2' x 4'
- _____ 25. Which of the following refers to the tiles that run along each wall of the room?
a. bay
b. border
c. wall molding
d. cross tees

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- _____ 26. Which of the following grid patterns is an alternative ceiling layout that measures the bay from main beam to cross tee instead of main beam to main beam?
- a. diagonal
 - b. 2' x 2'
 - c. H-pattern
 - d. 2' x 4'
- _____ 27. Which of the following grid patterns is simply a 2' x 2' or 2' x 4' grid pattern that has been rotated 45° to the walls within a room or area?
- a. diagonal
 - b. 2' x 2'
 - c. H-pattern
 - d. 2' x 4'
- _____ 28. The letters _____ are an abbreviation that stands for "unless noted otherwise."
- a. U.O.N.
 - b. U.S.O.
 - c. U.N.O.
 - d. U.O.O.
- _____ 29. The spacing of hanger wires cannot exceed _____ o.c. for 12-gauge hanger wire.
- a. 2'-0"
 - b. 3'-0"
 - c. 4'-0"
 - d. 5'-0"
- _____ 30. When using $\frac{15}{16}$ " grid material, the main beam control line is located by adding _____ to the main beam border dimension.
- a. $\frac{1}{4}$ "
 - b. $\frac{3}{16}$ "
 - c. $\frac{1}{2}$ "
 - d. $\frac{3}{4}$ "
- _____ 31. The length of each of the first two main beams to be installed is determined by measuring from the wall to the cross tee control line, and then subtracting _____ from the measurement.
- a. $\frac{1}{4}$ "
 - b. $\frac{3}{16}$ "
 - c. $\frac{1}{2}$ "
 - d. $\frac{3}{4}$ "
- _____ 32. Which of the following is a rendering of a building with trees, shrubs, and shading?
- a. pictorial drawing
 - b. reflected ceiling plan
 - c. floor plan
 - d. section drawing
- _____ 33. The architectural section of the drawings usually contains the title sheet, plot/site plan, floor plan, elevations, sections, details, and _____.
- a. electrical piping plan
 - b. reflected ceiling plan
 - c. air condition plan
 - d. water piping plan
- _____ 34. Sectional drawings provide important information about the concealed features of a structure, such as the height, materials, fastening systems, and _____.
- a. support systems
 - b. connecting systems
 - c. sound systems
 - d. steel systems
- _____ 35. Which of the following is the most important plan for the acoustical ceiling installer?
- a. electrical piping plan
 - b. reflected ceiling plan
 - c. air-conditioning plan
 - d. water piping plan

Answer Key

Basic Acoustical Ceiling Final Exam

True/False

- 1. True**
- 2. True**
- 3. False**
- 4. True**
- 5. False**
- 6. False**
- 7. True**
- 8. True**
- 9. True**
- 10. True**
- 11. True**
- 12. True**
- 13. True**
- 14. True**
- 15. True**

Multiple Choice

- 16. D**
- 17. B**
- 18. A**
- 19. C**
- 20. A**
- 21. C**
- 22. B**
- 23. C**
- 24. D**
- 25. B**
- 26. C**
- 27. A**
- 28. C**
- 29. C**
- 30. C**
- 31. B**
- 32. A**
- 33. B**
- 34. A**
- 35. B**