

Chapter 6 Test

Name: _____ Date: _____

Directions: Write the correct letter on the blank before each question.

Objective 1:

Describe different types of walls found in structures and the fire hazards they present.

- _____ 1. Which type of walls act as barriers to fire spread? (194)
- A. Party walls
 - B. Load-bearing walls
 - C. Fire-rated partition walls
 - D. Walls with flammable finishes
- _____ 2. Under fire conditions, a fire wall must have sufficient structural stability to: (194)
- A. allow the collapse of construction on either side without the wall itself collapsing.
 - B. control the collapse of construction on either side without the wall itself collapsing.
 - C. prevent the collapse of construction on either side without the wall itself collapsing.
 - D. protect occupants from the collapse of construction on either side without the wall itself collapsing.
- _____ 3. Fire wall ratings depend on: (194)
- A. locally adopted model codes.
 - B. maximum occupant count allowed in the structure.
 - C. occupancies being separated and the reason for the separation.
 - D. combined ratings of the construction materials used in the structure.

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- _____ 4. How does the presence of an automatic sprinkler system typically impact the fire-resistance rating required for a fire wall? (194)
- A. The newer the fire wall, the higher the rating
 - B. May reduce or eliminate the need for fire walls
 - C. Eliminates the need for building and fire inspections
 - D. The presence of an automatic sprinkler system has nothing to do with the fire-resistance rating of a fire wall
- _____ 5. What fire protection devices are required in ductwork that penetrates fire walls? (195)
- A. Automatic sprinkler systems
 - B. Dampers with automatic sprinkler systems
 - C. Fire protection devices are not required in ductwork
 - D. Dampers with activating devices and smoke detectors
- _____ 6. Why are breaches in party walls against code regulations? (195)
- A. Breaches prevent the proper operation of automatic sprinkler systems.
 - B. Breaches reduce the structural integrity of the construction of the buildings.
 - C. Breaches are usually hidden under the floor, hampering inspection efforts.
 - D. Breaches make it possible for fires to communicate from building to building.
- _____ 7. What is the difference between a fire partition and a fire barrier? (196)
- A. Fire partitions extend continuously through the building.
 - B. Fire partitions and fire barriers are exactly the same thing.
 - C. Fire barriers have a lower fire-resistance rating than partitions.
 - D. Fire barriers are required to terminate at the floor or roof deck.
- _____ 8. What is the purpose of an enclosure wall? (196)
- A. To prevent the spread of fire through an attic area
 - B. To prevent the vertical spread of fire through a building
 - C. To prevent the horizontal spread of fire through a building
 - D. To prevent the spread of fire from one building to another

- _____ 9. What type of enclosure walls may exist in old, fire-resistive structures? (197)
- A. Glass
 - B. Fire partition
 - C. Hollow, clay-tile
 - D. Lath and plaster
- _____ 10. What inspection challenges do curtain walls pose? (197)
- A. They conceal the structural details of a building.
 - B. Property owners update and remodel them often.
 - C. Inspectors are not allowed to inspect curtain walls.
 - D. It is difficult to determine what materials are used in their construction.

Objective 2:**Identify roof types and coverings and the fire hazards they present.**

- _____ 11. Why are wood shingles and shakes treated with fire-retardant chemicals difficult for inspectors to identify? (199)
- A. Contractors fail to retain documentation.
 - B. Fire-retardant chemicals do not have odor.
 - C. Paper identification labels are not visible after installation.
 - D. Exposure to weather elements destroys identification markers.
- _____ 12. What type of shingle produces characteristically black smoke? (200)
- A. Asphalt shingles
 - B. Clay roof coverings
 - C. Cement-based tiles
 - D. Wood and shake shingles
- _____ 13. Which type of roof covering has excellent resistance to flying embers? (200)
- A. Spanish tiles
 - B. Asphalt shingles
 - C. Clay and slate tiles
 - D. Wood and shake shingles

- _____ 14. Where can an inspector find information on the rework and replacement of roof coverings? (200)
- A. Codes
 - B. Builders
 - C. Standards
 - D. Manufacturers

Objective 3:
Identify floor characteristics.

- _____ 15. The fire resistance of a concrete floor depends on the _____ of the supporting steel. (200)
- A. age
 - B. brand
 - C. weight
 - D. fireproofing
- _____ 16. What presents a specific concern about the flame resistance of wood floors? (200)
- A. The floor's age
 - B. The floor's finish
 - C. The floor's installation
 - D. The floor's location in the structure
- _____ 17. Why is the structural floor system difficult to inspect? (200)
- A. Because contractors fail to keep meaningful records
 - B. Because the flammability of floor coverings is insignificant
 - C. Because floors are rarely covered with combustible materials
 - D. Because it is usually covered with some type of floor covering
- _____ 18. The _____ of a floor assembly plays a primary role in preventing vertical fire spread. (202)
- A. age
 - B. strength
 - C. reliability
 - D. fire resistance

- _____ 19. Identify the BEST example of a vertical penetration. (202)
- A. Attic
 - B. Curtain wall
 - C. Elevator shaft
 - D. Covered malls
- _____ 20. In open areas like atriums, building codes require: (202)
- A. smoke detectors.
 - B. fire-rated glazing.
 - C. evacuation alarms.
 - D. automatic sprinklers.
- _____ 21. Vertical openings that are commonly left unprotected include: (202)
- A. elevator shafts.
 - B. convenience staircases.
 - C. automatic sprinkler heads.
 - D. space around pipes and cables.

Objective 4:
Describe ceiling characteristics.

- _____ 22. Which of the following is a functional role of a ceiling? (203)
- A. Provide safety in multi-level buildings
 - B. Act as part of a fire-resistive assembly
 - C. Act as a part of reduced privacy features
 - D. Provide an attractive interior finish to a structure
- _____ 23. What materials are often required for ceilings as a fire-resistance component? (203)
- A. Steel and masonry
 - B. Wooden beams and concrete
 - C. Gypsum board and mineral tiles
 - D. Prefabricated dimensional lumber

Objective 5:**Describe stair characteristics important to inspectors.**

- _____ 24. A stair's *rise and run* refers to minimum and maximum rise and:
(203)
- A. step.
 - B. tread.
 - C. range.
 - D. mount.
- _____ 25. The building and fire codes specify the requirements for the _____ of stairs. (204)
- A. number
 - B. design and color
 - C. fire-spread rating
 - D. construction and use

Objective 6:**Describe the fire risks posed by how doors operate.**

- _____ 26. Generally, exit doors used as a means of egress must be _____ doors. (205)
- A. sliding
 - B. folding
 - C. swinging
 - D. revolving
- _____ 27. What is the main advantage of a sliding door? (205)
- A. They are inexpensive.
 - B. They don't have door swing.
 - C. They are out of sight when open.
 - D. They are more versatile for interior design.
- _____ 28. A _____ can be installed in large, vertical overhead doors to act as a means of egress. (205)
- A. sliding door
 - B. folding door
 - C. swinging door
 - D. revolving door

- _____ 29. Which of the following statements about revolving doors is MOST accurate? (206)
- A. Using revolving doors as a means of egress is restricted.
 - B. Swinging doors do not have to be located near revolving doors.
 - C. Revolving doors aid in the movement of hose and equipment into a building.
 - D. Revolving doors allow for a greater number of people to exit a building than a standard swinging door.
- _____ 30. Fire-rated door assemblies are manufactured, assembled, and installed in accordance with specific requirements that have been tested and listed by: (206)
- A. model codes.
 - B. industry standards.
 - C. locally adopted codes.
 - D. independent testing laboratories.
- _____ 31. A flush door is sometimes referred to as a _____ door. (206)
- A. slab
 - B. panel
 - C. metal
 - D. hollow
- _____ 32. Codes require that glass doors be made of: (207)
- A. framed glass.
 - B. beveled glass.
 - C. tempered glass.
 - D. frameless glass.

Objective 7:
Differentiate among fire doors based on construction and operation.

- _____ 33. Fire doors _____ egress pathways. (207)
- A. open
 - B. block
 - C. lead to
 - D. protect

- _____ 34. A(An) _____ is the oldest and simplest detection device that can activate a fire door. (207)
- A. fusible link
 - B. smoke detector
 - C. electromagnetic holder
 - D. magnetic hold-open device
- _____ 35. What device can be installed to close a fire door quickly? (207)
- A. Fusible link
 - B. Smoke detector
 - C. Electromagnetic holder
 - D. Magnetic hold-open device
- _____ 36. Which type of fire door closure is intended for use with a sliding fire door? (209)
- A. Fusible links
 - B. Spring hinge closers
 - C. Door operating devices
 - D. Electromagnetic door holders
- _____ 37. Which fire door classification method is still approved for use? (209)
- A. Hourly fire protection rating
 - B. Alphabetical letter designation
 - C. Combination of hour and letter
 - D. Fire door materials classification
- _____ 38. What can building and fire inspectors use to identify fire door classification when in the field? (210)
- A. Fire door labels
 - B. Personal opinion
 - C. Door construction materials
 - D. What the building manager tells them
- _____ 39. What needs to be located near a rolling steel fire door in order to prevent a dangerous dead end when it closes? (211)
- A. Sliding door
 - B. Folding door
 - C. Swinging door
 - D. Revolving door

- _____ 40. Swinging fire doors are required to: (213)
- A. close when a fusible link melts.
 - B. be connected to a fire alarm system.
 - C. swing in the direction of egress travel.
 - D. slide into position along a track by gravity.

Objective 8:**Describe different types of windows and how they operate.**

- _____ 41. Which type of window is a double-hung configuration? (214)
- A. Fixed
 - B. Pivoting
 - C. Moveable
 - D. Projecting
- _____ 42. If metal bars or grilles are encountered during an inspection, what should the inspector do? (216)
- A. Remove them
 - B. Issue a citation
 - C. Check their age
 - D. Test the operation

Objective 9:**Describe how interior finishes can contribute to fire spread.**

- _____ 43. What agency has attempted to study the relationship between types of finishes and fire behavior? (217)
- A. Underwriters Laboratories (UL)
 - B. Society of Fire Professional Engineers
 - C. National Fire Protection Association® (NFPA®)
 - D. National Institute for Standards and Technology (NIST)
- _____ 44. In what way does the combustibility of an interior finish contribute to fire behavior? (217)
- A. Creates an additional structural component
 - B. Produces flame that can contribute to life hazard
 - C. Interior finishes do not contribute to fire behavior
 - D. Adds to the intensity of the fire because it contributes fuel

Objective 10:**Explain the fire and life safety aspects of building services.**

- _____ 45. Any penetrations through a hoistway wall must: (217-218)
- A. never be allowed.
 - B. be connected to fire detection systems.
 - C. be done with an appropriately rated assembly.
 - D. be large enough for a person to pass through.
- _____ 46. Which of the following might be found in a utility chase? (218)
- A. Plumbing
 - B. Elevators
 - C. Linen chutes
 - D. Garbage chutes
- _____ 47. Kitchen grease exhaust ducts require _____ fire-resistive separation. (218)
- A. no
 - B. 1-hour
 - C. 2-hour
 - D. 30-minute