

**Advanced FBC: 7<sup>th</sup> Edition (2020) Five Walls of the IBC, A Guide to Fire-Resistance & Fire Protection Quiz**

- 1) Which of the five walls of the IBC are required to have a fire-resistance rating?
- a. Fire Wall, Fire Barrier, Fire Partition, Smoke Barrier
  - b. Fire Wall, Fire Barrier, Fire Partition, Smoke Barrier, Smoke Partition
  - c. Fire Wall, Fire Barrier, Fire Partition
  - d. Fire Wall, Fire Barrier, Smoke Partition, Smoke Partition

Answer: a

- 2) Which statement best describes the purpose of the hose stream test?
- a. To evaluate how the door assembly will react to water from activated sprinklers
  - b. To evaluate the structural integrity of the fire door assembly during fire exposure
  - c. To evaluate the amount of smoke leakage that may occur during the burn
  - d. To evaluate the structural integrity of the furnace frame

Answer: b

- 3) The test standard, NFPA 252 is the base criteria for ...
- a. UL 10B
  - b. UL 10C
  - c. Temp Rise Door Rating
  - d. All of the above

Answer: d

- 4) Which sentence best describes the Fire Wall?
- a. A fire-resistance-rated wall assembly of materials designed to restrict the spread of fire ...
  - b. A vertical assembly of materials designed to restrict the spread of fire ...
  - c. A fire-resistance-rated wall with sufficient structural stability ...
  - d. A partition constructed to limit the transfer or passage of smoke ...

Answer: c

- 5) A fire rated wall assembly is tested to the following criteria ...
- a. UL1784
  - b. UL10B
  - c. UL263
  - d. UL10C

Answer: c

- 6) NFPA is owned by ...
- a. Federal Government
  - b. State Fire Marshal
  - c. ICC
  - d. Conglomerate of insurance companies

Answer: d

- 7) Accredited testing laboratories in the United States offer a maximum size for testing door assemblies ...
- a. 156 sq feet
  - b. Unlimited
  - c. 200 sq feet
  - d. 500 sq feet

Answer: a

- 8) With regard to interior exit stairway shaft enclosures and exit passageways in non-sprinklered buildings, opening protectives are required to be ...
- a. Fire-resistance-rated
  - b. Smoke rated only
  - c. Constructed of metal only
  - d. Temperature-rise-rated

Answer: d

- 9) An opening protective test criteria allows for full heat transfer as opposed to a wall being required to stop or minimize heat transfer because ...
- a. Opening protectives are typically constructed of structural integrous materials
  - b. Door assemblies have a high failure rate
  - c. It is improbable to locate a (fire's) fuel load in a doorway
  - d. Fire is unlikely to pass through an opening

Answer: c

- 10) Which of the following is not the test standard for a fire-resistance-rated wall assembly?
- a. UL263
  - b. ASTM E-2226
  - c. NFPA 251
  - d. ASTM E-119

Answer: b

- 11) Which of the following is not a test standard for an opening protective?
- a. UL10B
  - b. UL10C
  - c. UL1794
  - d. UL263

Answer: d

- 12) With regard to opening protectives test criteria, if you pass the burn but not the hose stream what is the maximum labeled rating?
- a. 20 minutes
  - b. 60 minutes
  - c. 90 minutes
  - d. 30 minutes

Answer: a

- 13) Passive Redundancy means ...
- a. Sprinklers only
  - b. Fixed walls and their functions
  - c. Dry chemical systems
  - d. A combination of passive and active systems

Answer: d

- 14) Water is used as the medium for the hose stream test in order to ...
- a. Understand what happens to a hot door when the sprinklers activate
  - b. Save cost
  - c. Apply an even amount of pressure over the entire door surface
  - d. Cool the door down after the test

Answer: c

- 15) Which of the following is not a feature of passive redundancy?
- a. Fire extinguisher
  - b. Fire command center desk
  - c. Fire-rated walls
  - d. Fire-rated doors

Answer: b

- 16) The 156 sq foot rule applies to the following ...
- a. Fire Walls
  - b. Non-sprinklered buildings
  - c. Fire Barrier walls
  - d. All of the above

Answer: d

- 17) The 25% rule applies to the following ...
- a. Door openings
  - b. Smoke ratings
  - c. Floor assemblies
  - d. None of the above

Answer: a

- 18) Which of the following statements is the most correct about openings in Fire Partition walls?
- a. All openings are limited to an aggregate value of 25%
  - b. All openings are not limited to an aggregate value of 25%
  - c. All openings are limited to 156 sq feet in non-sprinklered buildings
  - d. All openings are limited to 200 sq feet in non-sprinklered buildings

Answer: b

- 19) Smoke Partition walls are rated to the following ...
- a. UL263
  - b. UL10B
  - c. NFPA 251
  - d. None of the above

Answer: d

- 20) At what temperature does ASTM E-119 require the wall to stop heat transfer?
- a. 300 degrees
  - b. 450 degrees
  - c. 250 degrees
  - d. 350 degrees

Answer: c