



BGR Technical
Publications

Sample Questions

2015 Residential Mechanical Inspector

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2015 M1 EXAM PREP

Editor



Inspector Series

*Based on the
2015 International Residential Code*

Timed Exam 4-30 A 35,000 Btu per hour water heater is to be common vented with a 150,000 Btu per hour furnace using a common vent with a total height of 30 feet. The connector rise is 2 feet for the water heater with a horizontal length of 4 feet. The connector rise for the furnace is 3 feet with a horizontal length of 8 feet. Assume single-wall metal connectors will be used with Type B vent. What size connectors and combined vent should be used in this installation?

- A. 3 inch
- B. 4 inch
- C. 5 inch
- D. 6 inch

Timed Exam 4-31 Type L venting systems shall conform to UL 641 and shall terminate with a listed and labeled cap in accordance with the vent manufacturer's installation instructions not less than _____ above the roof.

- A. 18 inches (457 mm)
- B. 2 feet (610 mm)
- C. 4 feet (1219 mm)
- D. 5 feet (1524 mm)

Timed Exam 4-32 Vented wall furnaces shall be located where they will not cause a fire hazard to _____.

- A. walls
- B. floors
- C. combustible furnishings
- D. doors
- E. all of the above

Timed Exam 4-33 The air removed by every mechanical exhaust system shall be discharged to _____. Exceptions ignored.

- A. a crawl space.
- B. the outdoors
- C. an attic
- D. the ridge vent

Timed Exam 4-34 A hydronic piping system shall not be in direct contact with any _____ that causes the piping material to degrade or corrode.

- A. building material
- B. corrosive water
- C. flushing solvent
- D. none of the above

Timed Exam 4-35 Solid-fuel-burning appliances shall be provided with combustion air in accordance with _____.

- A. NSFA 35
- B. IRC Table R301.2(1)
- C. the appliance manufacturer's installation instructions
- D. any of the above

Timed Exam 4-36 Additions, alterations or repairs shall not cause an existing mechanical system to become _____.

- A. unsafe
- B. hazardous
- C. overloaded.
- D. all of the above
- E. none of the above

Timed Exam 4-37 Appliances shall be accessible for inspection, service, repair and replacement _____ removing permanent construction or other appliances.

- A. without
- B. after
- C. only after
- D. any of the above

Timed Exam 4-38 What additional equivalent length should be added to a dryer exhaust duct length when determining duct length for compliance with the IRC and IMC codes if there are two 6 inch smooth 90 degree elbows in the run of the duct?

- A. 1 foot 9 inches
- B. 2 feet 6 inches
- C. 3 feet 6 inches
- D. there is no need to add equivalent length

Timed Exam 4-39 Installation of direct-vent water heaters within an enclosure is _____.

- A. mandatory
- B. always required
- C. not required
- D. none of these

Timed Exam 4-40 Vibration isolators installed between mechanical equipment and metal ducts shall be fabricated from approved materials and shall not exceed _____ in length.

- A. 24 inches (610 mm)
- B. 10 inches (254 mm)
- C. 6 inches (152 mm)
- D. 5 feet (1524 mm)

Timed Exam 4-41 Transition ducts used to connect the dryer to the exhaust duct system shall be a single length that is listed and labeled in accordance with UL 2158A. Transition ducts shall be a maximum of _____ in length. Transition ducts shall not be concealed within construction.

- A. 3 feet (914 mm)
- B. 5 feet (1524 mm)
- C. 20 feet (6 096 mm)
- D. 8 feet (2438 mm)