

# California Commercial Mechanical Inspector

## Practice Test

March 30, 2026

Time limit: 120 minutes

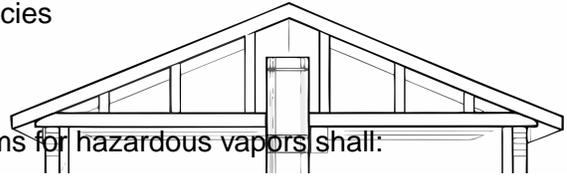
Online practice: [californiacerts.com/exams/ca-mechanical-inspector-i4/practice](https://californiacerts.com/exams/ca-mechanical-inspector-i4/practice)

Exam overview: [californiacerts.com/exams/ca-mechanical-inspector-i4](https://californiacerts.com/exams/ca-mechanical-inspector-i4)

Solution key: <https://californiacerts.com/resources/pdfs/ca-mechanical-inspector-i4/ca-mechanical-inspector-i4-practice-solution.pdf>

1. Ducts listed and labeled to UL 181 shall not be used for vertical risers in systems serving:

- A. More than two stories
- B. Only residential occupancies
- C. One story only
- D. Any height if insulated



2. Emergency exhaust systems for hazardous vapors shall:

- A. Exhaust contaminants per code and not recirculate hazardously
- B. Share a return plenum with offices
- C. Recirculate through MERV 8 filters
- D. Terminate in attic

3. Construction documents submitted for a mechanical permit shall be prepared by:

- A. A registered design professional
- B. The equipment supplier only
- C. The building owner
- D. Any licensed contractor

4. An appliance shall be connected to:

- A. A higher pressure without regulator
- B. Any available gas without review
- C. The fuel gas for which it was designed
- D. Mixed gases without listing

SCALE: 1/8" = 1'-0"

5. A medium-heat appliance produces flue gas temperature at the flue entrance of:

- A. Less than 500 degrees F only
- B. Not more than 1000 degrees F
- C. More than 1000 degrees F and less than 2000 degrees F
- D. 2000 degrees F or greater

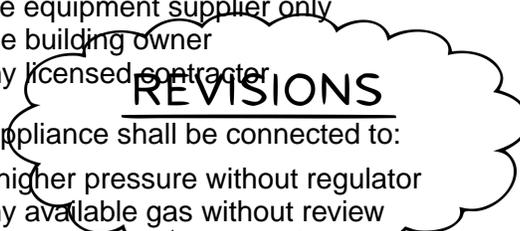
6. In combined combustion air openings between combined spaces shall each have minimum free area of:

CHECKED BY \_\_\_\_\_

SHEET NO \_\_\_\_\_

**MECHANICAL**

JOB NO \_\_\_\_\_



- A. 1 sq in per 1000 Btu/h (minimum 100 sq in each)
- B. 2 sq in per 1000 Btu/h
- C. 50 sq in fixed regardless of input
- D. 1 sq in per 4000 Btu/h

7. Combustion air ducts shall be constructed of:

- A. PVC schedule 40
- B. Unlined flexible dryer duct
- C. Wood boards
- D. Galvanized steel or equivalent approved materials

8. Product-conveying exhaust systems shall:

- A. Be constructed and listed for the material conveyed
- B. Use dryer transition duct
- C. Omit cleanouts
- D. Terminate in corridors

9. Who is responsible for enforcing the California Mechanical Code in a jurisdiction?

- A. The general contractor only
- B. The Authority Having Jurisdiction
- C. The equipment manufacturer
- D. The property owner

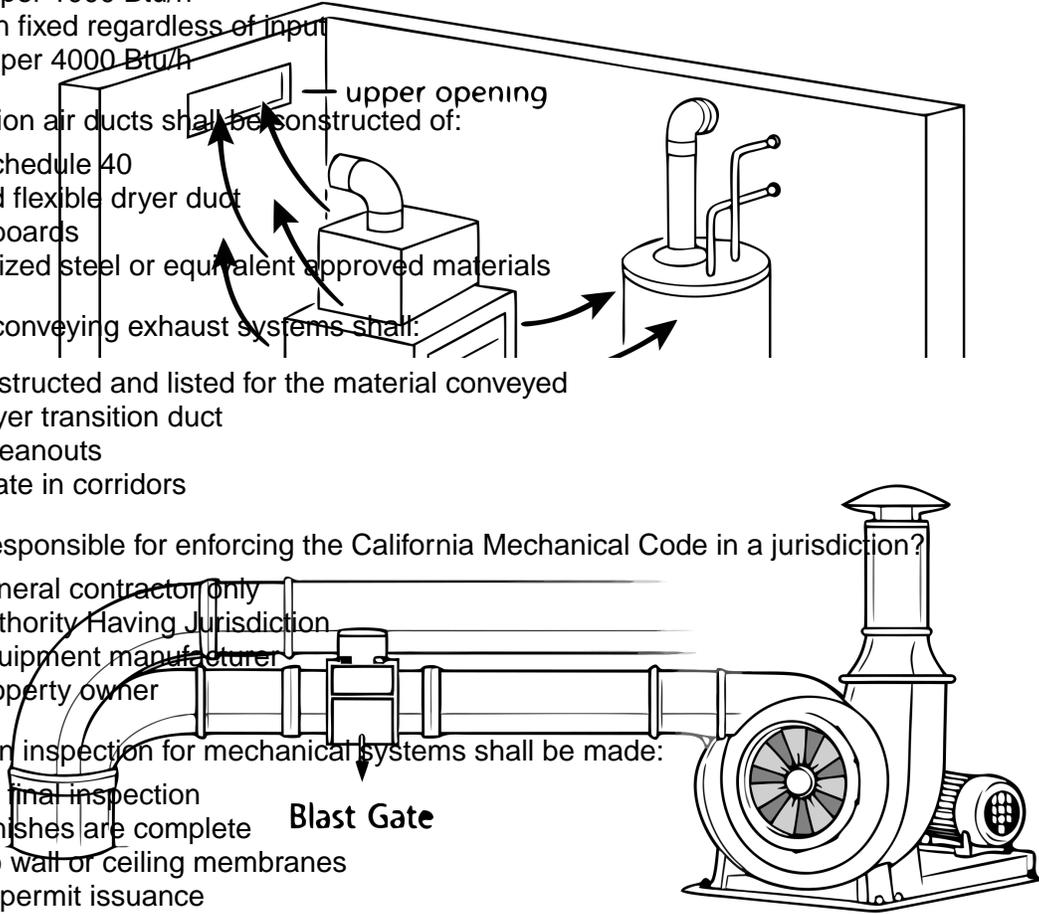
10. Rough-in inspection for mechanical systems shall be made:

- A. Only at final inspection
- B. After finishes are complete
- C. Prior to wall or ceiling membranes
- D. Before permit issuance

11. Fuel gas pipe sizing shall be determined using:

- A. Contractor experience only, without calculation
- B. Nominal pipe size matching appliance connection only
- C. A single standard table without adjustment for length or elevation
- D. Approved pipe sizing tables or engineering analysis for the installation conditions

12. For natural ventilation with operable openings on one side, the maximum distance from openings is:



**PRODUCT CONVEYING EXHAUST**

- A. 2H
- B. H
- C. 5H
- D. 10H

13. A direct vent appliance obtains all combustion air from:

- A. Underfloor crawl space without ducts
- B. The outdoors, supplied directly to the appliance
- C. Return air plenum only
- D. Adjacent indoor corridors only

14. Materials exposed in ducts or plenums shall be:

- A. Plastic without testing
- B. Carpet scraps allowed if covered
- C. Noncombustible or meet specified flame/smoke indices
- D. Any paint-grade wood

15. Explosive or combustible dust collectors require:

- A. PVC duct only
- B. Compliance with applicable code provisions for combustible dust
- C. Shared kitchen hood
- D. No special provisions

16. Masonry chimneys shall be lined with:

- A. PVC
- B. Approved clay flue lining or listed lining system
- C. Single-wall metal only
- D. Bare masonry only

17. Gas appliance connections shall comply with:

- A. Hose clamps on CSST without fittings
- B. Soldered copper only
- C. The code and applicable connector/listing requirements
- D. Compression fittings only underground

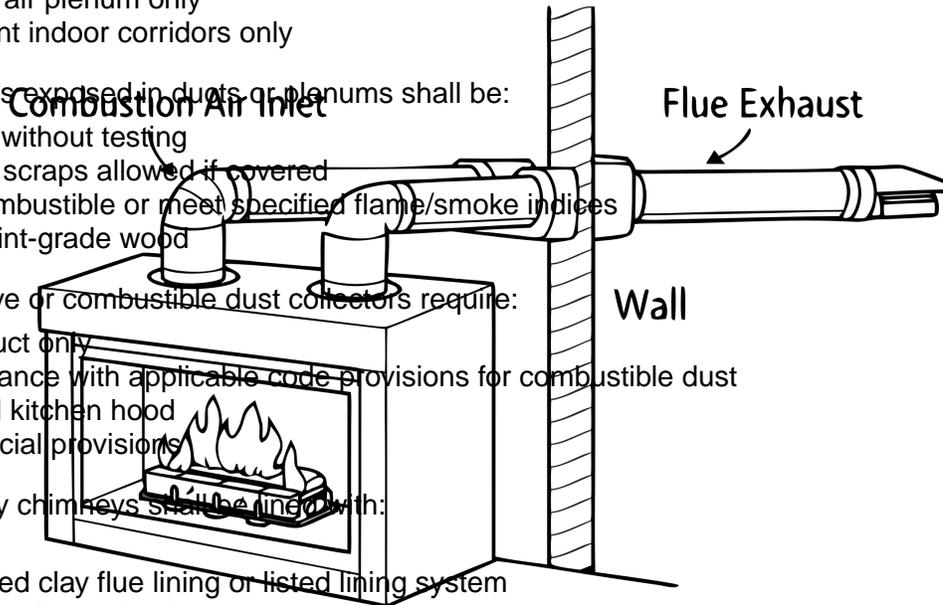
18. Makeup air for commercial kitchen grease exhaust hoods shall be provided so that:

- A. Is omitted where the kitchen is sprinklered
- B. May be 100 percent transfer air from adjacent dining rooms without treatment
- C. Replaces exhausted air as required by the code and referenced standards
- D. Is required only for Type II hoods

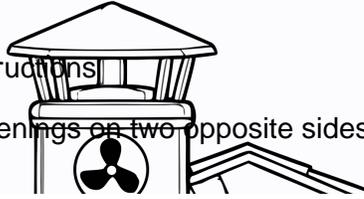
19. Appliance vents shall not discharge through screens with mesh smaller than:

- A. 1 inch mesh
- B. 1/4 inch mesh
- C. 1/8 inch mesh
- D. 1/2 inch mesh

20. Mechanical draft systems shall be:



- A. Shared with grease ducts
- B. Installed without listing
- C. Field-built only
- D. Listed to UL 378 and installed per instructions



21. For natural ventilation with operable openings on two opposite sides, the maximum distance from openings is:

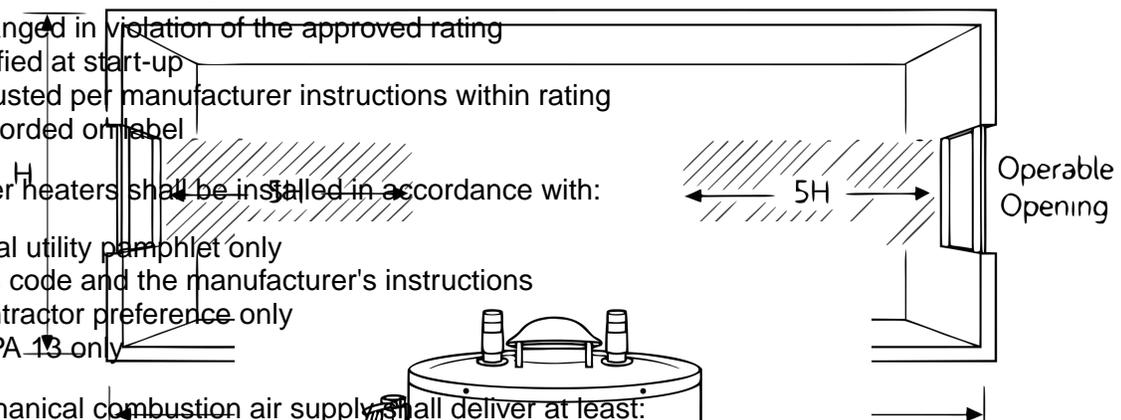
- A. 8H
- B. 2H
- C. 5H
- D. 3H

22. The appliance fuel input rate shall not be:

- A. Changed in violation of the approved rating
- B. Verified at start-up
- C. Adjusted per manufacturer instructions within rating
- D. Recorded on label

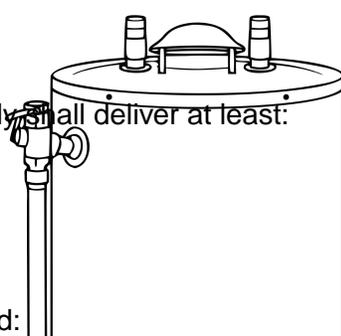
23. Water heaters shall be installed in accordance with:

- A. Local utility pamphlet only
- B. This code and the manufacturer's instructions
- C. Contractor preference only
- D. NFPA 13 only



24. Mechanical combustion air supply shall deliver at least:

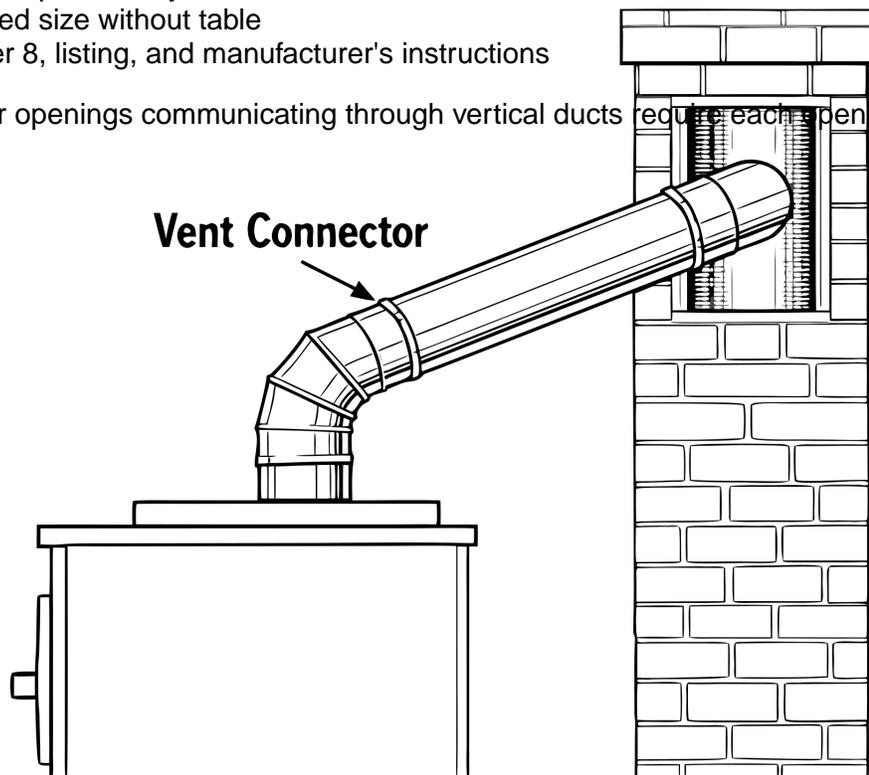
- A. 1.0 cfm per 1000 Btu/h
- B. 0.50 cfm per 1000 Btu/h
- C. 0.35 cfm per 1000 Btu/h
- D. 0.20 cfm per 1000 Btu/h



25. Vent connectors shall be installed:

- A. Horizontal only unlimited length
- B. Using flexible plastic only
- C. With reduced size without table
- D. Per Chapter 8, listing, and manufacturer's instructions

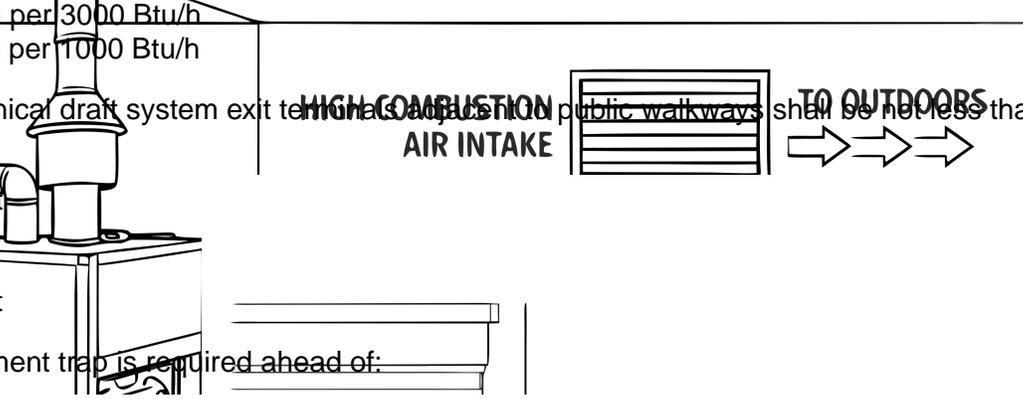
26. Two outdoor openings communicating through vertical ducts require each opening to have free area of:



- A. 1 sq in per 4000 Btu/h
- B. 1 sq in per 2000 Btu/h
- C. 1 sq in per 3000 Btu/h
- D. 1 sq in per 1000 Btu/h

27. Mechanical draft system exit terminals located in public walkways shall be not less than above grade:

- A. 12 feet
- B. 7 feet
- C. 4 feet
- D. 10 feet



28. A sediment trap is required ahead of:

- A. The inlet of equipment where required by the fuel gas code
- B. Only meters
- C. Never in commercial buildings
- D. Every manual shutoff valve

29. Outdoor air intake screens shall have openings not less than:

- A. 1/8 inch
- B. 1/4 inch minimum opening size
- C. No screening required
- D. 1 inch

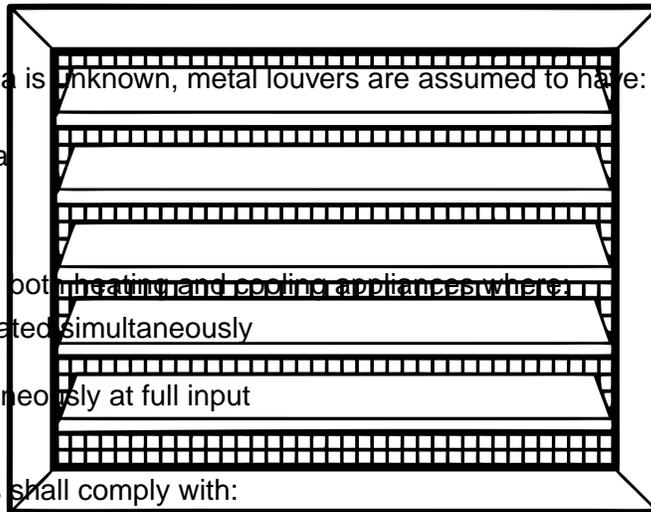
30. Where louver free area is unknown, metal louvers are assumed to have:

- A. 75 percent free area
- B. 100 percent free area
- C. 25 percent free area
- D. 50 percent free area

31. Gas piping may serve both heating and cooling appliances where:

- A. They cannot be operated simultaneously
- B. Piping is copper only
- C. They operate simultaneously at full input
- D. Only in dwellings

32. Refrigeration systems shall comply with:



1/4 in min mesh,  
1/2 in max openings

- A. EPA Section 608 only
- B. The California Mechanical Code and referenced standards
- C. ASHRAE 90.1 only
- D. Manufacturer warranty terms only

## Refrigerant Circuit

33. Electrical wiring in plenums shall comply with

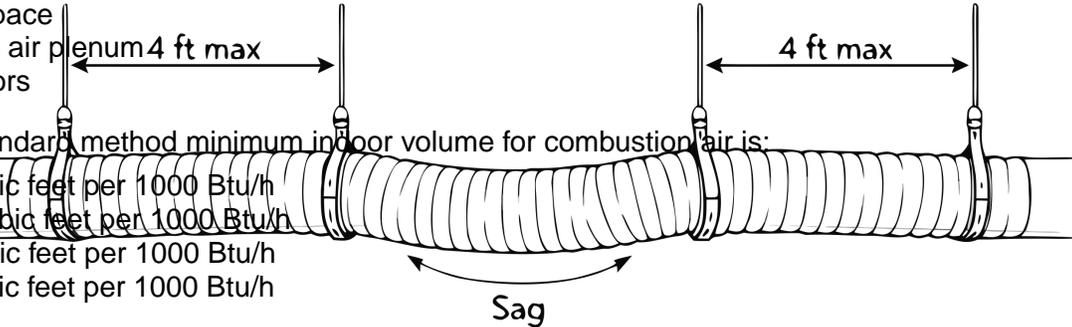
- A. NM cable without restriction
- B. Extension cords where hidden
- C. Romex in all plenums
- D. The California Electrical Code for plenum wiring

34. Horizontal flexible air ducts shall be supported at intervals not exceeding:

- A. 6 feet
- B. 2 feet
- C. 4 feet
- D. 8 feet

35. Domestic clothes dryers shall be exhausted to the:

- A. Crawl space
- B. Attic space
- C. Return air plenum
- D. Outdoors



36. The standard method minimum indoor volume for combustion air is:

- A. 25 cubic feet per 1000 Btu/h
- B. 100 cubic feet per 1000 Btu/h
- C. 50 cubic feet per 1000 Btu/h
- D. 75 cubic feet per 1000 Btu/h

37. A separate mechanical permit is required for each separate building or structure before regulated work begins, except where:

- A. Work falls under Section 104.2 exempt work
- B. A homeowner performs the work
- C. Only portable equipment is used permanently
- D. The job is under \$500 in value

38. Makeup air for hood exhaust systems shall:

- A. Be provided as required by code for the hood system
- B. Come only from adjacent dining rooms unfiltered
- C. Equal 50% of exhaust only
- D. Be omitted if MUA fans are noisy

39. The one-permanent-opening outdoor method requires minimum free area of:

- A. 1 sq in per 4000 Btu/h
- B. 1 sq in per 2000 Btu/h
- C. 1 sq in per 3000 Btu/h
- D. 1 sq in per 1000 Btu/h

## ONE OPENING METHOD

40. A "Confined Space" for fuel-burning appliances is a room whose volume is less than:

- A. 50 cubic feet per 1000 Btu/h
- B. 100 cubic feet per 1000 Btu/h
- C. 75 cubic feet per 1000 Btu/h
- D. 25 cubic feet per 1000 Btu/h

41. Evaporative cooling equipment shall be installed:

- A. In accordance with the code and manufacturer's instructions
- B. With no outdoor air connection
- C. Only on roofs
- D. Without permits if under 5 tons

42. Refrigerant piping and components shall be:

- A. Copper only in all occupancies
- B. Supported only by insulation
- C. Installed per code and protected from physical damage
- D. Run through fire-resistance-rated walls without protection

43. Once construction documents are approved, they:

- A. May be field-revised by the installer
- B. Expire after 90 days automatically
- C. Shall not be changed without AHJ authorization
- D. Need only verbal approval for minor changes

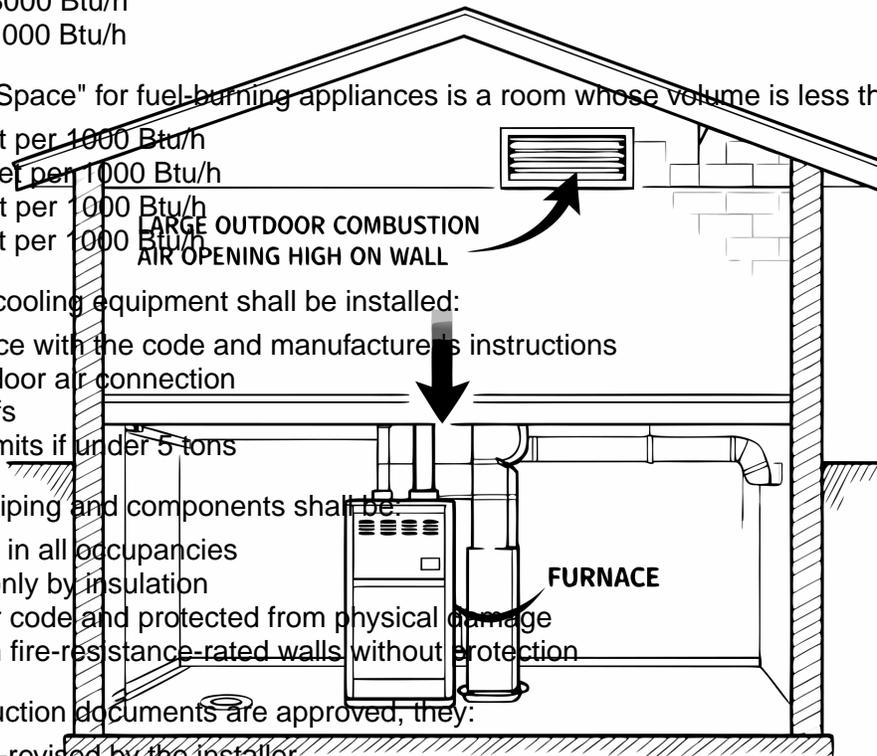
44. Type I hoods are required where:

- A. Dishwashing only
- B. Residential ranges only
- C. Only non-cooking warming occurs
- D. Appliances produce grease-laden vapors

45. Which appliance is generally NOT required to be vented?

- A. Water heater
- B. Listed range
- C. Residential gas furnace
- D. Unit heater

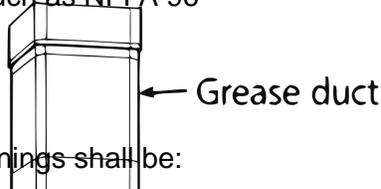
46. Where access under ducts in a crawl space is required, vertical clearance shall be not less than:



- A. 24 inches
- B. 12 inches
- C. 18 inches
- D. 30 inches

47. Commercial kitchen grease exhaust systems shall comply with:

- A. CMC and referenced standards such as NFPA 96
- B. IMC only, CMC silent
- C. Local restaurant menu only
- D. UL 300 for all ducts without listing

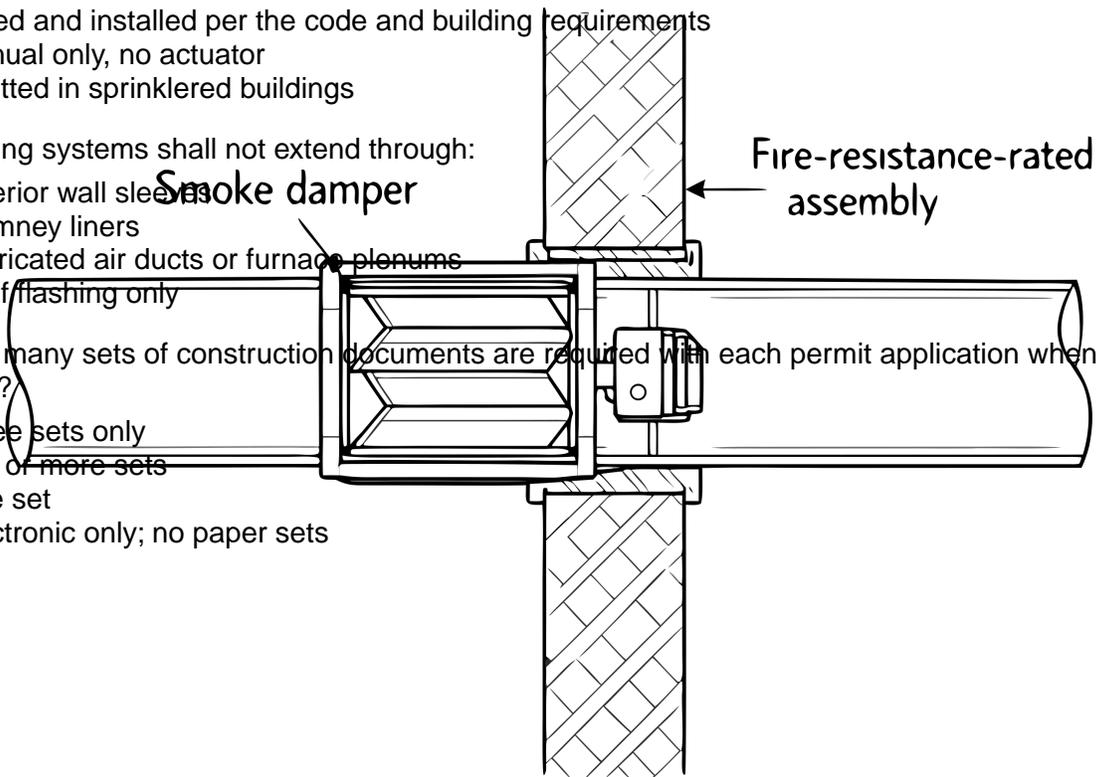


48. Smoke dampers in air transfer openings shall be:

- A. Field-fabricated from sheet metal
- B. Listed and installed per the code and building requirements
- C. Manual only, no actuator
- D. Omitted in sprinklered buildings

49. Venting systems shall not extend through:

- A. Exterior wall sleeves
- B. Chimney liners
- C. Fabricated air ducts or furnace plenums
- D. Roof flashing only



50. How many sets of construction documents are required with each permit application when plans are required?

- A. Three sets only
- B. Two or more sets
- C. One set
- D. Electronic only; no paper sets