

Chapter 12

WALL AND CEILING CONSTRUCTION

Text Pages 209-222

Name _____

Course _____

Date _____

Score _____

PART I: MATCHING: Match the correct term with its description listed below. Place the corresponding letter on the blank at right.

- A. Ashlar stonework
- B. Ceiling joists
- C. Common brick
- D. Corner bracing
- E. Cripples
- F. Door schedule
- G. Fire cut

- H. Flashing
- I. Rubble stonework
- J. Sole plate
- K. Subfloor
- L. Trimmers
- M. Veneer

1. Framing member used in residential frame wall construction. 1. _____
2. Provides a work surface for the construction of the frame walls. 2. _____
3. Short studs used above and below wall openings. 3. _____
4. Studs used in wall openings to support the header. 4. _____
5. Provides additional corner support in frame wall construction. 5. _____
6. Provides specific information about each door included in the plan. 6. _____
7. Placed across the width of the structure after the top plates have been added. 7. _____
8. An angular cut at the end of a joist to prevent the wall from falling in the event of a fire. 8. _____
9. Composed of dressed, cut, or squared stones. 9. _____
10. Composed of irregular-shaped field stones. 10. _____
11. Facing material used in wall construction. 11. _____
12. Prevents moisture from entering solid masonry or brick veneer walls. 12. _____
13. May have a lip on one or more edges. 13. _____

PART II: MULTIPLE CHOICE: Select the best answer and place its letter in the blank at right.

1. Which of the following species are generally used in wall framing lumber? 1. _____
 - A. Southern yellow pine.
 - B. Redwood.
 - C. Oak.
 - D. All of the above.

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|---|----------|
| 2. Frame wall construction begins with the:
A. Header.
B. Sole plate.
C. Top plate.
D. Studs. | 2. _____ |
| 3. Exterior wall corners provide:
A. Space for the wall to be built in small sections.
B. Adequate wind bracing.
C. Sufficient support for the building.
D. All of the above. | 3. _____ |
| 4. A nailing base for interior wall materials may be provided by:
A. A 2 x 6 fastened to cross blocking.
B. Placing 1/2 in. plywood sheathing next to the studs.
C. Applying rigid foam insulation to the wall section.
D. All of the above. | 4. _____ |
| 5. Header size refers to:
A. The overall size of the header.
B. The size of the material used.
C. The size of the rough opening plus the size of the spacer.
D. None of the above. | 5. _____ |
| 6. Trussed headers are more functional for:
A. Frame walls without corner bracing.
B. Areas subject to high winds.
C. Openings wider than 8'-0".
D. All of the above. | 6. _____ |
| 7. Special framing is needed for:
A. Extra bathtub support.
B. Wall openings for heating ducts.
C. Wall backing for a water closet.
D. All of the above. | 7. _____ |
| 8. Which of the following statements is true of masonry veneer?
A. Moisture does not collect between the veneer and the frame wall.
B. The veneer does not support the weight of the wall.
C. The most common thickness used is 1 in.
D. None of the above. | 8. _____ |
| 9. A building material which has sharp corners and lines and is very uniform in size is:
A. Face brick.
B. Common brick.
C. Cobweb stone.
D. Random rubble. | 9. _____ |

PART III: COMPLETION: Complete each sentence with the proper response. Place your answer on the blank in the right column.

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|---|----------|
| 1. The trend in residential frame wall construction is toward more _____ and less on-site construction. | 1. _____ |
| 2. The most common lumber grade is _____ grade. | 2. _____ |
| 3. The sole plate functions as an anchor for the wall and a _____ for interior and exterior wall sheathing. | 3. _____ |

Wall and Ceiling Construction

Name _____

4. A space of 8'-1 1/2" from the bottom of the ceiling joists to the top of the subfloor allows a finished wall height of approximately _____ ft. 4. _____
5. The advantage of using solid blocking is a _____ (shorter/longer) construction time. 5. _____
6. The distance is usually the same from the top of each window and door to the _____. 6. _____
7. All wall openings need a _____ or lintel above the opening to provide support for the weight above. 7. _____
8. To prevent the ceiling joists from interfering with the roof slope, the upper corner of the joist is cut to match the _____ of the roof. 8. _____
9. Framing around a ceiling opening for a disappearing stairway requires the use of _____ headers. 9. _____
10. To provide support for a bow window, cantilevered _____ should be used. 10. _____
11. Corrugated metal wall ties may be placed in mortar joints 16 in. apart vertically and _____ in. apart horizontally. These bond the masonry wall to the frame wall or bond two thicknesses of masonry together. 11. _____
12. One inch of dead air space should be left between masonry veneer and the _____ wall. 12. _____
13. Termite _____ are placed at the base of solid masonry or brick veneers to prevent the entrance of termites. 13. _____
14. The length, width, and thickness of one commonly used firebrick is _____ (nominal size). 14. _____

PART IV: SHORT ANSWER/LISTING: Provide brief answers to the following questions.

1. List the three types of residential wall construction.
 - A. _____
 - B. _____
 - C. _____
2. Name the three types of bracing commonly used in frame wall construction.
 - A. _____
 - B. _____
 - C. _____
3. Why would the exterior frame wall be placed 1/2 to 3/4 in. in from the outside edge of the foundation wall?

4. Is greater shrinkage more likely to occur in solid blocking construction or cripple construction?

5. In frame wall construction, the header is usually longer than the rough opening. Explain why.

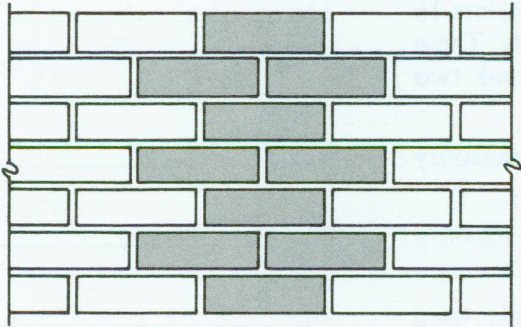
6. How does ceiling joist construction differ from floor joist construction?

7. List the advantages and disadvantages of concrete block walls.

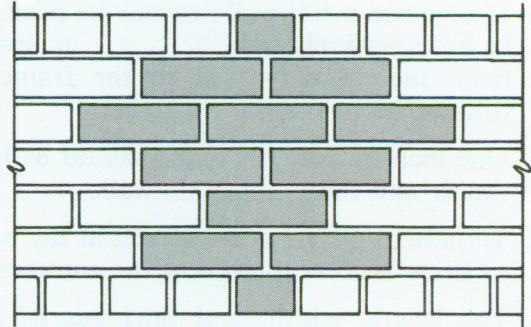
8. Advantages of a brick or stone veneer wall over a solid masonry wall are:

- A. _____
- B. _____
- C. _____

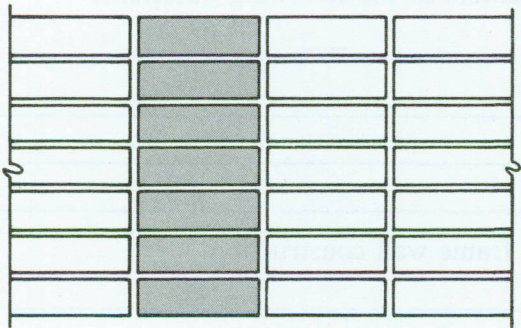
9. Identify the brick bonds shown below.



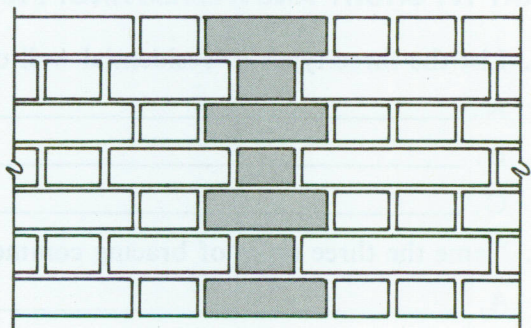
A. _____



B. _____



C. _____



D. _____