

# 15 Doors and Windows

Text, Pages 319–351

Name \_\_\_\_\_

Course \_\_\_\_\_ Date \_\_\_\_\_ Score \_\_\_\_\_

## Part I: Multiple Choice

Select the best answer and write the corresponding letter in the space provided.

1. Which of the following is a type of interior door? 1. \_\_\_\_\_
  - A. Awning.
  - B. Double-action.
  - C. Clerestory.
  - D. All of the above.
  
2. Metal bi-fold doors are usually \_\_\_\_\_ thick and commonly used as closet doors. 2. \_\_\_\_\_
  - A. 1"
  - B. 1-1/8"
  - C. 1-1/4"
  - D. 1-1/2"
  
3. Sliding or bypass doors are: 3. \_\_\_\_\_
  - A. Used frequently for large openings.
  - B. Not subject to warping.
  - C. Limited to two doors for each opening.
  - D. All of the above.
  
4. Double-action doors are: 4. \_\_\_\_\_
  - A. Used for large openings.
  - B. Hinged to swing through an arc of 180°.
  - C. Made of metal and usually 1" thick.
  - D. All of the above.
  
5. Accordion doors: 5. \_\_\_\_\_
  - A. Require little space.
  - B. Are produced in a large variety of materials and designs.
  - C. May use individual hinged panels.
  - D. All of the above.

6. Exterior glass doors are: 6. \_\_\_\_\_
- A. Usually hollow cored.
  - B. Frequently used between kitchens and dining rooms.
  - C. Thicker than interior doors.
  - D. None of the above.
7. Door jambs used in residential construction are: 7. \_\_\_\_\_
- A. Usually made of bronze.
  - B. Composed of two side jambs and a head jamb.
  - C. 1-3/4" thick for exterior doors and 1" thick for interior doors.
  - D. All of the above.
8. Which of these statements should you follow when planning the windows for a dwelling? 8. \_\_\_\_\_
- A. To gain the maximum amount of light possible, place primary windows on the west.
  - B. Four small windows will yield less contrast than one large window.
  - C. Glass area equal to at least 20% of the floor area should provide adequate natural light.
  - D. The best distribution of light is achieved by placing all of the windows on one wall.
9. To provide ample ventilation in a home: 9. \_\_\_\_\_
- A. The openings for ventilation should be at least 10% of the floor area.
  - B. Windows should be placed to receive prevailing breezes.
  - C. Plan the location of windows for the best movement of air across a room.
  - D. All of the above.
10. Windows of the same general type purchased from different manufacturers will seldom have: 10. \_\_\_\_\_
- A. Different specifications.
  - B. Uniform specifications.
  - C. Specifications that are not important to the designer or contractor.
  - D. None of the above.
11. The rough framed space in the wall needed to install the window is the: 11. \_\_\_\_\_
- A. Glass size.
  - B. Basic unit.
  - C. Rough opening.
  - D. Sash opening.

Name \_\_\_\_\_

12. Casement windows have side-hinged sashes that swing out and may be opened or closed by: 12. \_\_\_\_\_
- A. Handles on the sash.
  - B. Push-bars on the frame.
  - C. Cranks.
  - D. All of the above.
13. Which of the following lines should be used to show the hinge positions on a hinged window? 13. \_\_\_\_\_
- A. Dashed line.
  - B. Object line.
  - C. Short break line.
  - D. Section line.
14. Which of the following statements best represents hopper windows? 14. \_\_\_\_\_
- A. Hopper windows rarely interfere with the interior space.
  - B. Hopper windows are more efficient when placed low on the wall because they direct air upward.
  - C. Hopper windows swing outward.
  - D. Hopper windows are difficult to operate and maintain.
15. Picture windows may: 15. \_\_\_\_\_
- A. Be opened to provide ventilation.
  - B. Require custom-made screens.
  - C. Be large fixed glass units used with other window types.
  - D. None of the above.
16. The side units in a bay window are normally placed at \_\_\_\_\_ to the exterior wall. 16. \_\_\_\_\_
- A. 90°
  - B. 60°
  - C. 45°
  - D. None of the above.
17. Bow window units normally use from \_\_\_\_\_ casement units to form the arc. 17. \_\_\_\_\_
- A. three to six
  - B. four to seven
  - C. five to eight
  - D. Any of the above.

18. Which of the following is a characteristic of clerestory windows?

- A. They are placed high on the wall.
- B. They are often installed in the roof of a dwelling.
- C. They are typically fixed windows.
- D. None of the above.

18. \_\_\_\_\_

## Part II: Completion

Complete each sentence with the proper response. Place your answer on the space provided.

1. Interior flush doors are normally covered with 1/8" plywood of mahogany or \_\_\_\_\_ and are smooth on both sides.

1. \_\_\_\_\_

2. Pocket doors are a variation of the sliding door and are often used between the \_\_\_\_\_ and dining room.

2. \_\_\_\_\_

3. Accordion doors are available in wood, \_\_\_\_\_, and plastics.

3. \_\_\_\_\_

4. The top half of a(n) \_\_\_\_\_ door may operate separately from the bottom half.

4. \_\_\_\_\_

5. Exterior flush doors are commonly 1-3/4" thick and \_\_\_\_\_ high.

5. \_\_\_\_\_

6. Exterior panel doors are produced in white pine, \_\_\_\_\_ fir, and various other woods.

6. \_\_\_\_\_

7. To provide for an automatic garage door opener, allow extra headroom above the open door to mount the \_\_\_\_\_ on the ceiling.

7. \_\_\_\_\_

8. The information listed in the door schedule is obtained from \_\_\_\_\_.

8. \_\_\_\_\_

9. In frame construction, the space between the jamb and rough framing is covered with trim called \_\_\_\_\_.

9. \_\_\_\_\_

10. A(n) \_\_\_\_\_ is placed at the bottom of the door opening between the two side jambs. It drains water away from the door.

10. \_\_\_\_\_

11. Construction details of windows and doors are normally drawn in \_\_\_\_\_ through the head jamb, side jamb, and sill.

11. \_\_\_\_\_

12. Extremely bright areas and dark corners are eliminated by proper design and placement of \_\_\_\_\_.

12. \_\_\_\_\_

13. A shallow penetration of light over a broad area can be achieved by using short, \_\_\_\_\_ windows.

13. \_\_\_\_\_

14. A thin, deep penetration of light can be achieved by using tall, \_\_\_\_\_ windows.

14. \_\_\_\_\_

15. Windows placed high on the wall result in a \_\_\_\_\_ degree of light penetration into the room.

15. \_\_\_\_\_

Name \_\_\_\_\_

16. Areas of large glass will make the room size appear \_\_\_\_\_. 16. \_\_\_\_\_
17. Three common materials used in the manufacture of window frames are wood, \_\_\_\_\_, and plastics. 17. \_\_\_\_\_
18. Window sashes are held in place by \_\_\_\_\_ devices or are counterbalanced. 18. \_\_\_\_\_
19. The overall dimensions of the window unit represent the \_\_\_\_\_ unit size. 19. \_\_\_\_\_
20. Narrow, horizontal glass slats are the components of a \_\_\_\_\_ window. 20. \_\_\_\_\_
21. \_\_\_\_\_ windows are circular windows typically installed above another window. 21. \_\_\_\_\_
22. \_\_\_\_\_ windows may be custom made in various shapes and sizes from window manufacturers. 22. \_\_\_\_\_
23. Casement windows are usually placed \_\_\_\_\_ degrees to the exterior wall in a box bay window. 23. \_\_\_\_\_
24. Most skylights are \_\_\_\_\_ in shape to fit between roof trusses; custom-made units are possible to accommodate most any design situation. 24. \_\_\_\_\_

### Part III: Short Answer/Listing

Provide brief answers to the following questions.

1. Which materials are commonly used for the panels of panel doors? \_\_\_\_\_  
\_\_\_\_\_
2. List one advantage and two disadvantages of pocket doors. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. Where are French doors often used? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. What are the basic differences between interior and exterior doors? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Name the two most frequently used garage door widths in residential construction. \_\_\_\_\_  
\_\_\_\_\_
6. Where would a door schedule be found in a set of drawings? \_\_\_\_\_  
\_\_\_\_\_

7. What is the purpose of a door jamb? \_\_\_\_\_  
\_\_\_\_\_
8. Why are rough openings framed with extra space in the length and width for interior doors?  
\_\_\_\_\_  
\_\_\_\_\_
9. Which materials are most commonly used in the construction of window and door sills? \_\_\_\_\_  
\_\_\_\_\_
10. List three factors you should consider when planning the location of a window to take advantage of a pleasing view. \_\_\_\_\_  
\_\_\_\_\_
11. When selecting windows, first consider the interior requirements. However, what can be done to improve the outside appearance of the home and add to the continuity of the exterior design? \_\_\_\_\_  
\_\_\_\_\_
12. What is meant by the sash opening? \_\_\_\_\_  
\_\_\_\_\_
13. When would it be wise to draw a section of the support mullion? \_\_\_\_\_  
\_\_\_\_\_
14. List four variations of circle top windows commonly used in residential construction. \_\_\_\_\_  
\_\_\_\_\_
15. List the specific information commonly found on a window schedule. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

### Part IV: Matching

Match the correct term with its description listed below. Place the corresponding letter on the space provided.

- A. Awning.
- B. Brick mold.
- C. Drip cap.
- D. Double-hung.
- E. Fixed.
- F. Glass size.

- G. Glider.
- H. Mullions.
- I. Muntins.
- J. Prehung doors.
- K. Rails.
- L. Stiles.

- |  |           |
|--|-----------|
| 1. Vertical members of a panel door.   | 1. _____  |
| 2. Horizontal members of a panel door.   | 2. _____  |
| 3. Units consisting of the jamb and door ready for installation.                               | 3. _____  |
| 4. A strip used in frame construction to shed water over a door or window.                     | 4. _____  |
| 5. Used in a masonry wall to cover the space between the jamb and the rough framing.           | 5. _____  |
| 6. Windows with two sashes that slide up and down in grooves.                                  | 6. _____  |
| 7. Small or thin vertical or horizontal bars that divide the glass area into smaller sections. | 7. _____  |
| 8. Vertical or horizontal components that divide window units.                                 | 8. _____  |
| 9. Comparable to the inside sash dimensions.   | 9. _____  |
| 10. Also known as horizontal sliding windows.  | 10. _____ |
| 11. Top-hinged windows that swing out at an angle.   | 11. _____ |
| 12. Circle top, picture, and random-shaped windows are examples of this window type.           | 12. _____ |

# Part V: Problems/Activities

1.

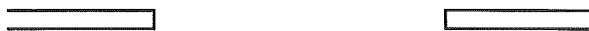
Directions:

Draw a plan view symbol for each of the door types specified below.

FLUSH OR PANEL DOOR



BI-FOLD DOORS



DUTCH DOOR



ACCORDION DOOR



POCKET DOOR



SLIDING (BYPASS) DOORS



DOUBLE-ACTION DOOR



FRENCH DOORS



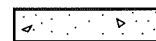
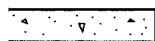
EXTERIOR PANEL DOOR



SLIDING GLASS DOOR



GARAGE DOOR



SCALE: 1/4"=1'-0"

PLAN VIEW DOOR SYMBOLS

NAME:

15-1



2.

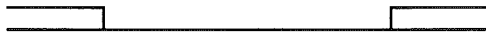
Directions:  
Draw a plan view symbol for each of the window types specified below.



DOUBLE-HUNG WINDOW



AWNING WINDOW



CASEMENT WINDOW (TWO SASH)



FIXED WINDOW



HORIZONTAL SLIDING WINDOW



HOPPER WINDOW



DOUBLE-HUNG 45° BOW WINDOW



FIVE-UNIT CASEMENT BOW WINDOW

SCALE: 1/4"=1'-0"

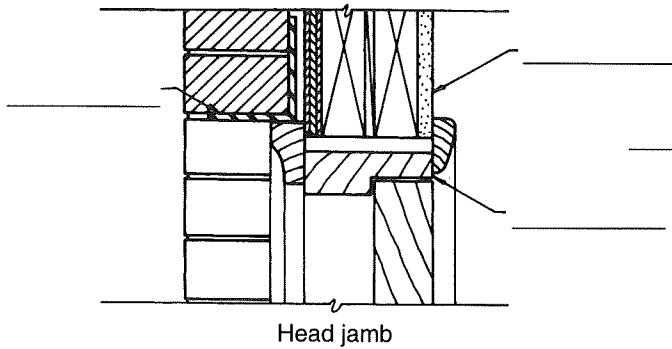
PLAN VIEW WINDOW SYMBOLS

NAME:

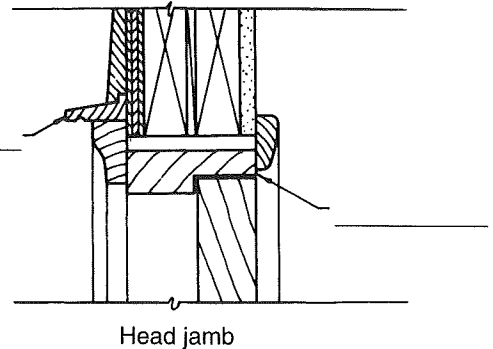
15-2

3.

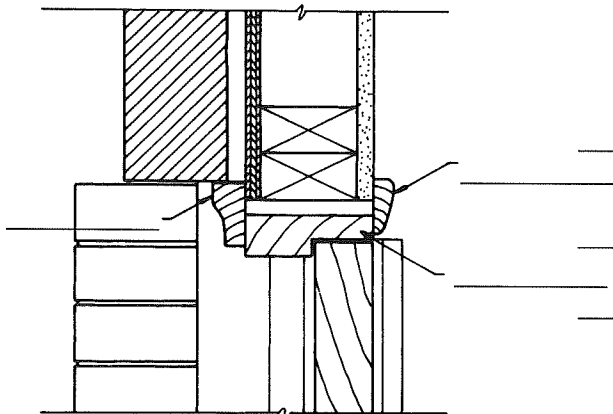
Directions:  
Label the parts indicated on the exterior door details below.



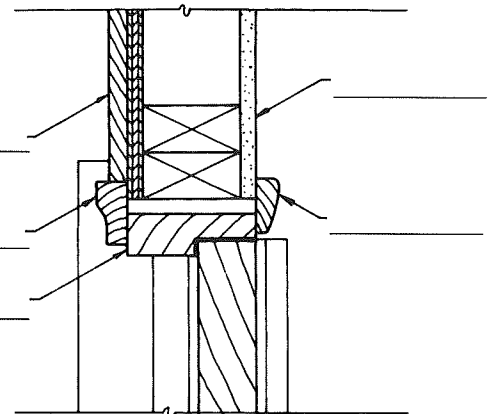
Head jamb



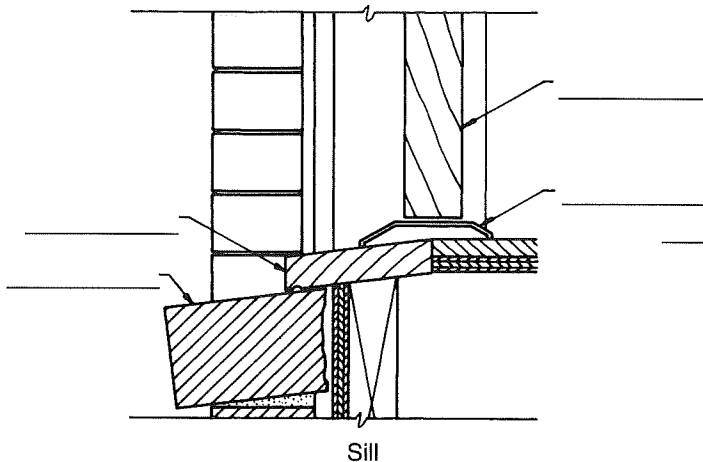
Head jamb



Side jamb

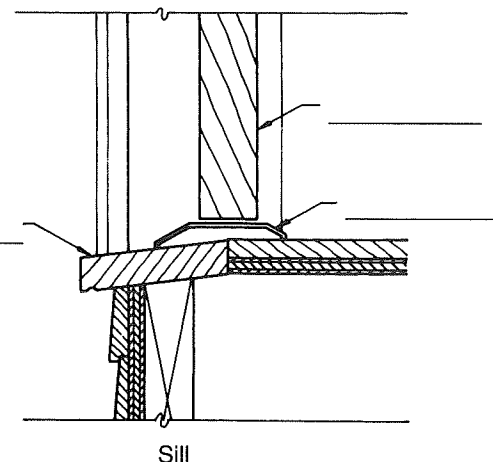


Side jamb



Sill

Brick veneer



Sill

Frame

EXTERIOR DOOR DETAIL

NAME:

15-3