

UNIT C: Floor Plans

Competency: 203.00

Draw Floor Plans

Objective: 203.03

Determine door and window types.

R1, pgs. 118, 243-249, 256

A. Doors

1. General classifications

a. Flush doors

- 1) Smooth on both sides (usually mahogany or birch plywood)
- 2) May be hollow core or solid core

b. Panel doors

- 1) Heavy frame around perimeter
- 2) Parts
 - i. Stiles – vertical members
 - ii. Rails – horizontal members
 - iii. Panels – thin material enclosed by stiles and rails
 - iv. Louvered doors are panel doors.

2. Exterior doors

a. Typical door sizes

- 1) 6'-8" tall by 1-3/4" thick
- 2) One opening must be a minimum of 3'-0"
- 3) Insulated

b. Sloping sills at the bottom sheds water away from opening

c. Swinging doors

- 1) Hinged (right hand or left hand)
- 2) Swing into the house

d. Sliding doors

- 1) Made with wood or metal frames and tempered glass for safety
- 2) Provide glass areas and are excellent for access to a patio or deck

3) Common sizes are 6'-0" and 8'-0"

e. French doors

- 1) Purchased with mullions and muntins between glass panes or one large glass pane
- 2) May be used individually, in pairs, or in groups of three or four

f. Garage doors

- 1) Generally are overhead doors
- 2) May be one piece or sectional
- 3) Widths may be for a single or double opening
 - i. Singles are usually 8', 9', or 10'
 - ii. Doubles are usually 15', 16', or 18'
- 4) 7'-0" is the most commonly used height

3. Interior doors

- a. Standard height = 6'-8"
- b. Thickness = 1-3/8"
- c. Widths vary based on a 2" module
 - 1) Bedroom doors = 2'-6"
 - 2) Rooms other than sleeping areas = 2'-6"
 - 3) Bathroom doors = 2'-0" or 2'-4"
 - 4) Closet doors should be as large as possible

d. Bi-fold doors

- 1) Set of two doors making up one door unit
- 2) Hung on a track
- 3) Popular for closet doors

e. Sliding doors/Bypass doors

- 1) Hung on a track and slide left to right
- 2) Often used in wide openings, like closets

f. Pocket doors

- 1) Hung on a track and slides into a wall cavity
- 2) Frees floor space when open
- 3) Come packaged with a framed pocket which is built into the wall

g. Double-action doors

- 1) Spring hinge mounted on the door allows it to swing back and forth
- 2) May be one door or two doors

B. Windows

1. Purpose

- a. Admits light from outside
- b. May provide fresh air and ventilation
- c. Adds detail, balance, and interest to the exterior
- d. Visually enlarges interior space

2. Types

a. Double hung windows

- 1) Have two sashes that slide up and down
- 2) Most common type of window

b. Horizontal sliding/gliding windows

- 1) Have two or more sashes that slide horizontally
- 2) Operates on a track

c. Casement windows

- 1) Sashes are hinged on the side which swing outward.
- 2) On the exterior elevation, hinged side is represented by dotted lines forming a triangle.

d. Awning windows

- 1) Sash is hinged on the top and swings out.
- 2) Allows the unit to be open in light rain
- 3) On the exterior elevation, the hinged top is represented by dotted lines forming a triangle.

e. Hopper windows

- 1) Sash is hinged on the bottom, typically swinging inward.
- 2) Inward swing can interfere with the use of space near windows.
- 3) Can be constructed into unusual shapes

f. Fixed windows

- 1) Do not open to the outside, thus provide no ventilation
- 2) Often combined with other windows to provide interesting designs
- 3) Common fixed windows include Picture and Palladium windows

g. Bay and Bow windows

- 1) May be fixed or casement
- 2) Project from the structure
- 3) Bay windows offer a traditional style.
 - i. Usually the sides are drawn at 45° or 30°.
 - ii. Depth of the bay is often between 18" and 24".
 - iii. Center window is typically either a fixed panel, double-hung, or casement window.
 - iv. Commonly extend from floor to ceiling
 - v. Often has its own roof structure
- 4) Bow windows are arranged in a circular plan.

h. Skylights

- 1) Built into the roof to admit light
- 2) May or may not open for ventilation

C. Door and Window Schedules

1. Marks are placed on the floor plan to identify all doors and windows
 - a. Marks are numbers or letters placed inside circles or polygons to identify the door or window.
 - b. Marks are placed close to the door or window.
 - c. Doors/windows with exactly the same size and characteristics have the same mark.
2. Arranges all the information about a door or window in a chart
 - a. Repeats the mark found on the floor plan
 - b. Lists the number of doors/windows needed for this structure
 - c. List the size of individual and multiple units
 - d. Identifies the type of door or window
 - e. Includes any material notes and/or special remarks about the unit

- f. May include elevation drawings of the door or window near the chart to help define its appearance

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See also Handouts and A1

Competency: 203.00
Draw Floor Plans
Objective: 203.04
Identify floor plan symbols.
A. Doors and openings
1. Hinged (swinging)
a. Exterior
b. Interior
2. Sliding
3. Pocket
4. Double-action
5. Arch or casad opening
6. Garage
B. Windows
1. Double-hung
2. Horizontal sliding
3. Swinging
a. Casement
b. Awning
c. Hopper
4. Fixed
5. Combination
a. Bay
b. Bow
6. Skylight
C. Bathroom fixtures
1. Tub
2. Water closet