Carpentry Level One

Introduction to Construction Drawings, Specifications, and Layout 27104-13

Objectives

List the types of drawings usually included in a set of plans and describe the information found on each type.

e. Describe the methods of dimensioning construction drawings.

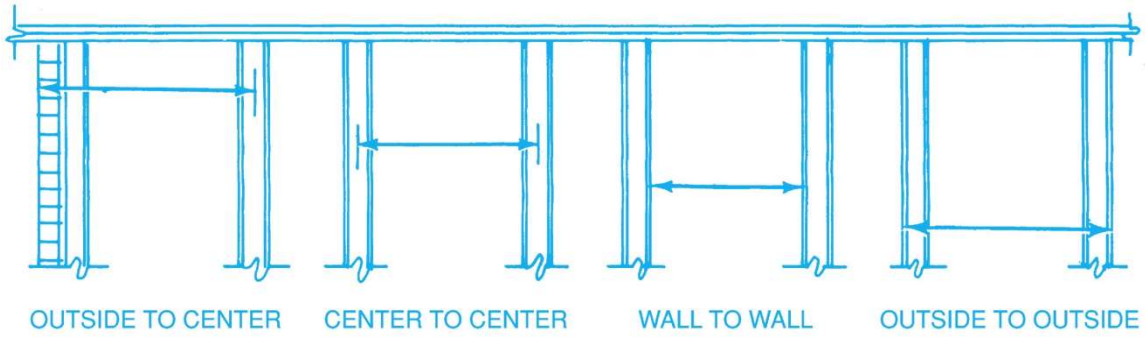
Kickoff Activity

- Convert the following measurements to metric units.

17.78 inches	123 feet 7 inches
6.120 meters	421 5/8 inches
11.432 yards	247 feet 8 inches

Section 1.5.0

- Dimensions on drawings
  - Indicate actual sizes, distances, and measurements
  - May be indicated from outside to center, center to center, wall to wall, or outside to outside
  - Are noted in full scale



Section 1.5.0

- **NOTE**
  - Unless absolutely necessary, always use the dimensions shown on a drawing rather than ones obtained by scaling the drawing. Some print reproduction methods may slightly reduce or enlarge drawings, which can introduce errors if the print is scaled.

Section 1.5.0

- In the United States, length dimensions shown on construction drawings are typically expressed in feet and inches using the English system of measurement.
- In Canada and many other parts of the world, the SI (International System of Units) metric system of measurement is used for dimensions.

Section 1.5.0

- The two common length measurements used in the metric system on construction drawings are the meter and millimeter.
  - 1 meter = 39.37 inches (in)
  - 1 meter = 3.2808 feet (ft)
  - 1 meter = 1.0936 yards (yd)
  - 1 millimeter = 0.03947 inch (in)

Section 1.5.0

- Some common practices for dimensioning drawings:
  - Dimension lines are unbroken lines, with the dimensions placed above and near the center of the line.
  - Dimensions over one foot are shown in feet and inches (not decimals). Dimensions less than one foot are shown in inches only.

Section 1.5.0

- Some common practices for dimensioning drawings (continued)
  - Dimensions are placed to be read from the right or from the bottom of the drawing.
  - Overall building dimensions go to the outside of all other dimensions.

Section 1.5.0

- Some common practices for dimensioning drawings (continued)
  - Rectangular room sizes can be shown by stating width and length (usually near the room name), rather than using dimension and extension lines.
  - Rooms are sometimes dimensioned from the center lines of partition walls, but wall-to-wall dimensions are more common.

Section 1.5.0

- Some common practices for dimensioning drawings (continued)
  - Window and door sizes are usually shown in window and door schedules.
  - Dimensions that cannot be shown directly on the floor plan because of their size are placed at the end of leader lines.

Section 1.5.0

- Some common practices for dimensioning drawings (continued)
  - When stairs are dimensioned, the number of risers is placed on a line with an arrow indication in either an up or down direction.
  - Architectural dimensions always refer to the actual size of the building, regardless of the scale of the drawings.

Wrap Up

Make a scale drawing of a simple floor plan using a scale of your choice. Make sure to include dimensions on your plans, as well as the scale.

Next Lesson: Plan View Drawings, Part Three
Review Sections 1.6.0–1.6.5