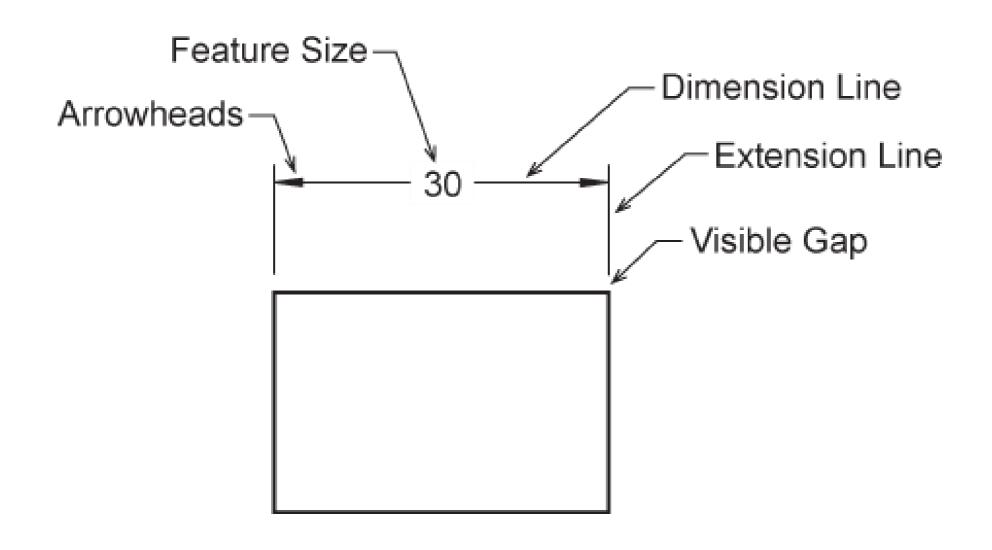
(6) X S GROOVE PIN A DRILL - 3 HOLES EQUALLY SPACED WASHER X45° CHAM-SAE 2315-1 REQD | Will | TO MIND (4) I"BALL BEARING RILL-2 HOLE (3) BALL CAP (2) JACK SCREW-SAE 1045 DROP (I)HOUSING FORGING-I REQD SAE 1120 DROP FORGING-I REQD

Presentation #1

Basic Dimensioning Skills

Objective 006.01 Identify the accepted standards for mechanical dimensioning practices.

Dimensioning Vocabulary



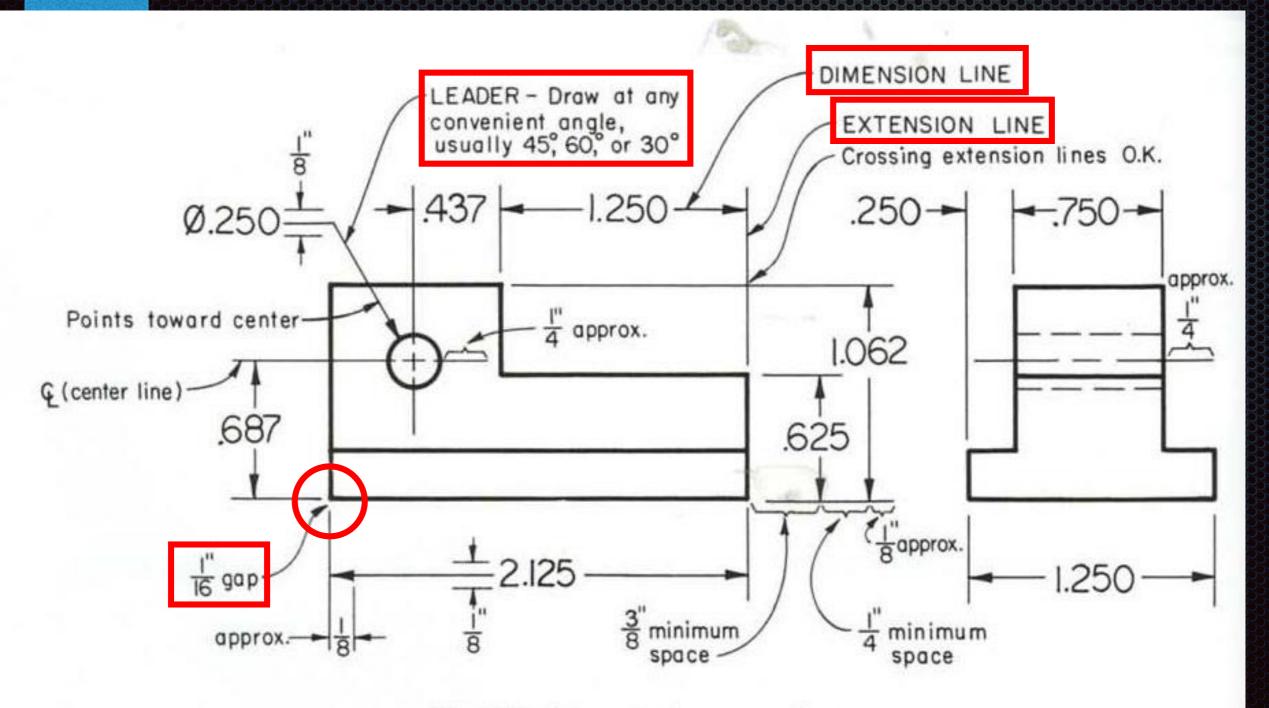


Fig. 10-1. Dimensioning conventions.

Dimension lines:

- show the BEGINNING and the END of the measurement.
- TERMINATED by arrowheads.
- THIN line weight.
- should be BROKEN to allow for the numbers to be inserted.

Extension lines:

- EXTEND the edge of the object.
- THIN line weight.
- there should be a VISIBLE GAP between the object and the start of the extension line.
- extension lines should extend BEYOND the last dimension line.

Leader lines:

- are drawn from a NOTE or DIMENSION to place where the note applies.
- are drawn at an ANGLE (usually 30, 45, or 60 degrees).
- should have a SHORT SHOULDER that if extended, would intersect the note at mid-height.
- may end with an ARROWHEAD or DOT.

- if extended, the leader would pass through the CENTER of arcs or circles (radial dimension).
- leaders should NOT cross over or through other leaders or dimension lines.
- AVOID making leaders parallel or perpendicular to visible edges.
- should extend from the FIRST word or the LAST word of the note.

Arrowheads:

- can be SOLID filled or OPEN.
- should be approximately 2.5 to 3 times as long as wide.

Dimensioning placement for reading:

- UNIDIRECTIONAL recognized as standard for engineering drawing.
- ALIGNED preferred practice in architectural drawing.