

Arrow Method of View Projection

In the arrow projection method, arrows are drawn pointing to the principle (main) view. Each arrow with a lower case letter (a label) represents a view in that direction. The views can then be placed anywhere on the drawing, and the label on the view (an upper case letter) along with the arrow, indicates where the view is projected from. The arrow projection method allows the views to be placed wherever the engineer desires. An example of the arrow projection method is shown below.

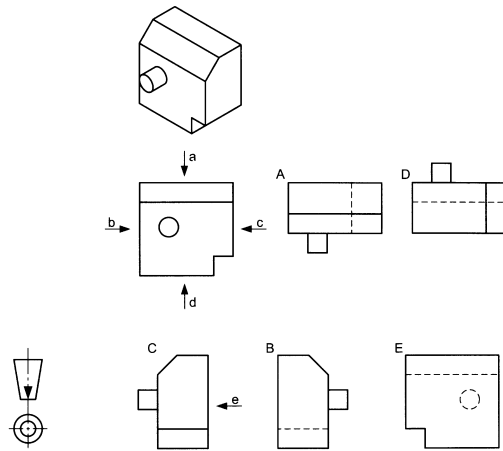


Figure 1.8 Arrow Projection Example

DIMENSIONS

This section covers a few terms used in the topic of dimensions. A **dimension** is the linear distance between two features, or the size of a feature of size. ^[8] A **basic dimension** (or dimensional value) is the numerical value of a dimension expressed in a specific unit and indicated on drawings with lines and relevant symbols. ^[9]

There are three types of dimensions:

1. **Linear dimension** — the linear distance between two features or the size of a feature of size. ^[10]
2. **Angular dimension** — the angle between two features or the angle of an angular feature of size. ^[11]
3. **Auxiliary dimension** — a dimension derived from other dimensions given for information purposes only. ^[12]

Dimensional Units

ISO 129-1 states that SI units shall be used for dimensions (see ISO 1000) and unambiguously establishes that metric units are required on drawings made to ISO standards. The dimensional units should also be stated on the drawing, usually near the title block. ^[13] An example is shown in Figure 1.4, on page 6.

ELEMENTS OF DIMENSIONING

The elements of dimensioning include the following items: ^[14]

- Extension lines
- Dimension lines
- Dimension line termination
- Dimension separator
- Origin indication
- Leader lines
- Reference line

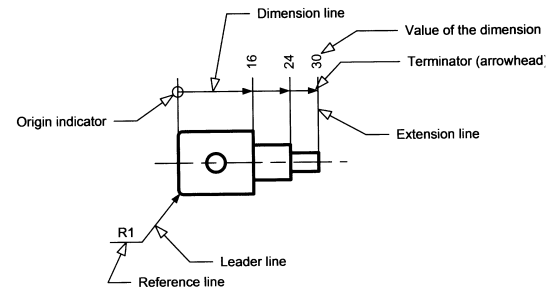


Figure 1.9 Displaying Dimensions

Extension Lines

An **extension line** is a line connecting the feature(s) to the ends of the correct dimension line.