Dimensioning additional recommendations

The first thing:
USE YOUR JUDGEMENT.
Think as a designer!

DIMENSIONING COMPONENTS

- THE GRAPHIC dimensioning components are the dimension lines, the tick, and the text.
- Dimensions should be tagged in the same manner and with the same “look” throughout the set.

PLACING DIMENSIONS ON THE DRAWING

- Building Envelope (exterior) Dimensions: OUTSIDE the building.
- Building Interior Dimensions: INSIDE the building.

More on HOW TO DIMENSION

- Dimension only new work. Dimension existing work only as necessary to locate new work.
- Dimension in the order things are built. In interiors, probably the first thing to be constructed will be the framing of the partitions, so start dimensioning the partitions first.
- Use an existing element to start dimensioning from, such as the a core partition, or the interior face of an exterior wall or the interior face of aluminum framing.
- Once the location of the partitions is fixed, do a second round and dimension the openings in the partitions, carpentry, panels, and other interior elements.
- Do not repeat dimensions. If the dimensions are given in a separate sheet, for example the location of toilet accessories, refer to that location with a note if you think it is necessary for clarity, but preferably avoid repeating.
- Do not mix dimensions and notes; keep them separately. Preferably group notes together by type (sheet notes, construction notes)
- The notes and the dimensions should be in the sheet where they belong, for example, do not put notes that describe objects in elevations on the floor plans. The exception to this is the height of ceilings which is noted in the RCPs.

DATUM IS A FIXED POINT TO START DIMENSIONING FROM.

Typically, you have a datum at every level on top of the concrete slab (TOC) and that is the point from which you will take the vertical dimensions from.

DIMENSIONING ANGLES AND CURVES

ANGLES:

- Fix three points (the two ends and the intersection of two lines).
- Fix one side (two points) and noting the angle measurement between the two lines and the end of the .

CIRCLES:

- Fix the center (two dimensions) and note the radius.
- Fix the center and the position of a point in the perimeter of the circle (two dimensions).

ARCS (segments of circles); Fix the center of the circle and the ends of the two radius lines that intersect the arC.

AVOID

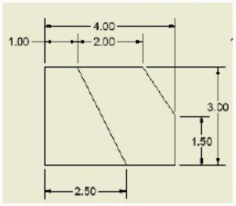
- Dimensioning outside applicable standards, i.e., dimension woodwork to the tolerances given in the Architectural Woodwork Institute (AWI).
- Dimensioning so it cannot achieve in the field or will work.
- Obvious dimensions: for example, items whose dimensions are given by their construction itself, like a regular door at the end of a partition, or whose location is given by adjacent construction already located.
- Dimensioning items whose size we know otherwise, I.e., doors which are included in the schedule.

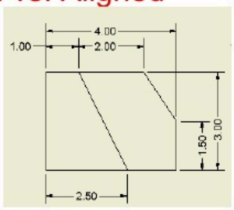
Use a list to check dimensioning!

Try to check dimensioning separately from other components of the Drawings.

Dimension Text

Unidirectional vs. Aligned

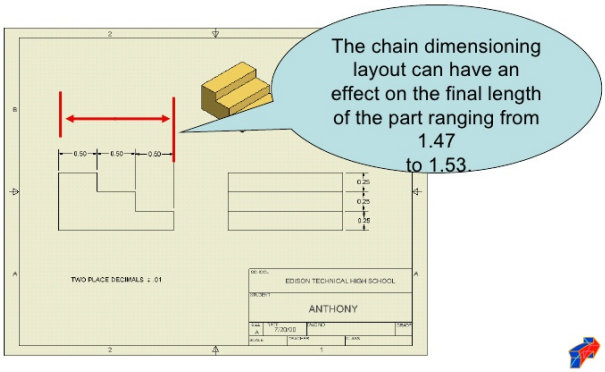




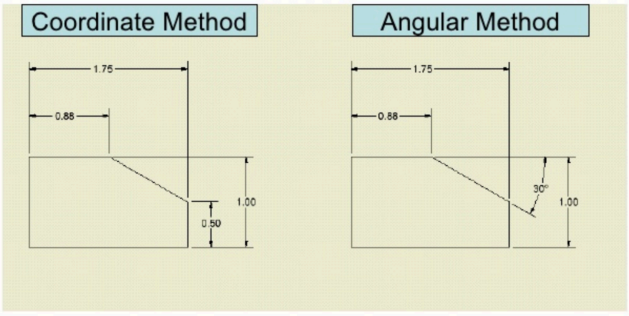
Unidirectional dimensions are placed so they can be read from the bottom of the drawing sheet. This method is commonly used in mechanical drafting.

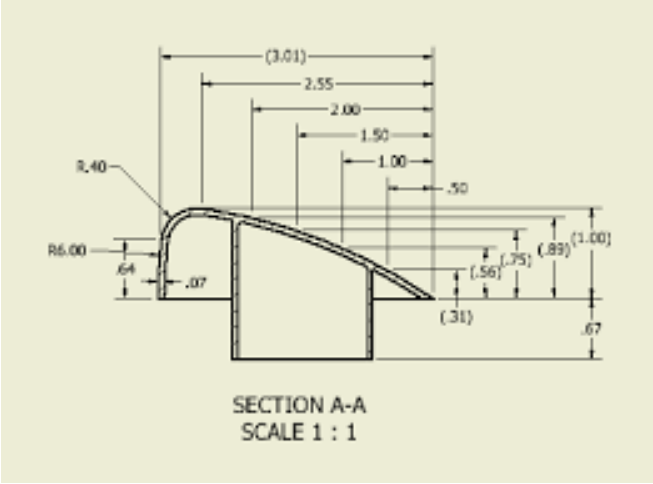
Aligned dimensions are placed so the horizontal dimensions can be read from the bottom of the drawing sheet and the vertical dimensions can be read from the right side of the drawing sheet. This method is commonly used in architectural and structural drafting.

Chain Dimensioning



Dimensioning Angles





Datum Dimensioning