The POSITION for locating appurtenances consists of three coordinates: one in elevation, and two in plan.

The two coordinates to a point of reference, P, in plan, can be specified either by the polar coordinates of distance and azimuth, Fig 1a, or by a pair of offsets with respect to one conveniently located face of the tower and one of the legs on that face, Fig 1b. The face and leg are identified by the azimuth of the line joining the centre of the tower to the middle of the face or the leg, as applicable.

There are two kinds of appurtenance:

1. Linear appurtenances, requiring two points of reference, one at each end of the run, such as ladders and transmission lines, Fig 2

Because of the extra space required in the tables using offsets, for linear appurtenances the user must provide at least two lines of data, one for the bottommost elevation, and one for the topmost elevation. In addition, the user may provide one for each additional elevation at which the position is off the line defined by the two extreme positions. All lines of data that relate to a single linear appurtenance or group of appurtenances must have the same GROUP ID.

and

2. Discrete appurtenances, requiring only one point of reference, such as antenna, platforms, etc, Fig 3.

The face offsets are measured at 90 degrees from the line joining the outside faces of angle legs, or the line joining the centres of round legs. They are positive going away from the tower and negative going into the tower.

The leg offsets are measured along the line of the face used for the face offset, from the heel of an angle leg, or from the centre of a round leg. They are positive going away from the second leg of that face and negative going towards it.





