

3.9- DRAWING FOUNDATION

Important: 1- In order to detect foundation under wall, foundations should be defined from the static axis that goes through the midpoint of walls (eccentricity is possible if desired).

2- In order to detect foundation under wall, foundations should be drawn as a single piece covering the walls.

3- Modeling by drawing a single foundation under all walls of an axis is a better method, with regards to performing step 2.

Foundations should be drawn in foundation story. When you perform copy operation from the basement to foundation story, the axes are copied into foundation story. For this operation, select foundation story in the window displayed by clicking Copy Story button when the active story is the basement story. Later, when foundation is the active story, copied basement axes and wall projections will ease the drawing of foundation.



To draw foundation, Foundation form is displayed by clicking the  button in the main window.

The image shows a dialog box titled "Foundation Properties" with a close button (X) in the top right corner. The dialog box contains several input fields with labels and units:

| | | |
|-------------------|----|----|
| Foundation ID | T1 | |
| Foundation Width | 80 | cm |
| Foundation Height | 40 | cm |
| Left delta | 40 | cm |
| Right delta | 40 | cm |
| Eccentricity | 0 | cm |
| Upper Elevation | 0 | cm |

At the bottom of the dialog box, there are three buttons: "OK", "Cancel", and "Help".

There is no need to enter any information in the Foundation ID section. The software automatically assigns names while drawing.

Foundation width and height is entered in centimeters.

Left delta and right delta values define the extension length of the foundation from axis node, in centimeters. This value can be set as half the foundation width of the opposite orientation.

Eccentricity is the distance of the virtual axis of the foundation center axis to the program axis.

Foundation top level value can be equal to wall bottom level value in gradual buildings and buildings with English basements. Foundation top level value does not affect the way static calculations are performed. In other words, the software can perform load transfer even if foundation bottom level value is not changed in gradual buildings or buildings with English basement.

After setting foundation parameters, exit by clicking OK, and in the main window foundation is drawn by clicking first and second points over the nodes.