



**Andhra Pradesh State Skill
Development Corporation**



Extended Three-Dimensional Analysis of Building System

ETABS

Methods of Assigning Slabs



METHODS OF ASSIGNING SLABS

Objective

This chapter describes the methods of assigning slabs.

Draw Floor/Wall Objects

Use the **Draw menu > Draw Floor/Wall Objects** command or click one of the buttons shown in this topic to draw shell objects.

1. Set the View. Some drawing tools do not function in some views. The views that can be used with a particular tool are indicated by the parenthetical information in the command name. That is, the Draw Shells (Plan, Elev, 3D) command can be used in any view—Plan, Elevation or 3D—while the Draw Rectangular Shells (Plan, Elev) command can be used only in a Plan or Elevation view. If a particular button does not appear to function, try changing the View setting.

TIP: When in a Plan view, set the *Similar To* drop-down list on the right side of the Status bar to *Similar Stories* or *All Stories* to quickly add shell objects, such as walls, to multiple stories simultaneously. Conversely, to add shell objects to one story only, be sure to set this drop-down list to *One Story*. Note that the Similar Stories feature has no effect on the Draw Wall Openings option because it functions relative to a Wall object rather than a Story level.

2. Click the **Draw menu > Draw Floor/Wall Objects** command to display the list of subcommands. Click a subcommand or its associated toolbar button to display the **Properties of Object** form for the selected type of shell object in the lower left-hand corner of the window. Use the options on the Properties of Object form to specify properties and control placement of shell objects for efficient integration into the model.
3. Draw the specified shell object as follows:
 - Click the **Draw menu > Draw Floor/Wall Objects > Draw Floor/Wall (Plan, Elev, 3D)** command or button.
 - Click on a grid intersection, a previously defined joint or any point in the plane.
 - Click again on any number of other points either clockwise or counter clockwise, collinear or not, to draw the area object. Return to the first point and double click on it to complete the shell object. Click the **Select** button or the **Esc key** on the keyboard to exit Draw mode
 - Click the **Draw menu > Draw Floor/Wall Objects > Draw Rectangular Floor/Wall (Plan, Elev)** command or button.
 - Left click once to define the position of one corner point of the shell.
 - Drag the mouse and left click again to define the diagonally opposite corner point. Note that as the mouse is dragged, a dashed line is visible indicating the current extent of the shell object.



- When using this command in an elevation view, if a shell object is drawn such that it crosses story levels, ETABS immediately breaks the object at the story levels. For example, if a shell object is drawn so that its top is at the 4th story level and its bottom is at the 2nd story level, ETABS immediately breaks the object into two objects with the break line at the 3rd story level.
- Click the **Draw menu > Draw Floor/Wall Objects > Quick Draw Floor/Wall (Plan, Elev)** command or button. This command works in two ways.
 - Click in any grid line space and a shell object is drawn in that grid line space.
 - Depress and hold down the left mouse button. While keeping the left button depressed, drag the mouse to "rubber band" a window around one or more grid line spaces. Then release the left mouse button. Shell objects are automatically placed in each grid line space included in the "rubber band" window.
- 4. Exit any of the drawing tools by clicking the Select Pointer button or the **Draw menu > Select Object** command.