



Andhra Pradesh State Skill Development Corporation



Extended Three-Dimensional Analysis of Building System

ETABS

Navigation Tools

NAVIGATION TOOLS


Objective

This chapter contains description of NAVIGATION TOOLS. There are mainly 3 types of navigation tools namely Zoom, Pan & 3D orbit Rotation.


ZOOM





Five zoom features are available in ETABS. These features can be used to zoom in or out on a view. Zooming in makes components of the model appear larger, which makes it is easier to view individual items in the model. Zooming out makes the individual model components appear smaller, which makes it is easier to view the entire model in a single window. All five zoom features are available on the View menu and by using toolbar buttons. The zoom features and their associated toolbar buttons are as follows:

- **Rubber Band Zoom,**  Zooms in on the model by windowing. To use the command, depress and hold down the left mouse button. While keeping the left button depressed, drag the mouse to "rubber band" a window around the portion of the view of interest. The rubber band window that shows the extent of the zoom appears as a dashed line. When the left mouse button is released, the new "zoomed" view is displayed.

TIP: The Rubber Band Zoom command can also be initiated by using the **F2** command.

- **Restore Full View,**  This command has two uses. First, if the Zoom In or Zoom Out commands (see below) have been used from the initial default view of a window, this command can be used to return to the original default view where the entire structure just fills the window. The second use for this command occurs if the **View menu > Pan** Command has been used to change the view in the window. In that case, the Restore Full View button returns the default view.

TIP: The **Restore Full View** command can also be initiated by using the **F3** command.

- **Previous Zoom,**  This command restores the immediately previous zoom settings. If the **View menu > Previous Zoom** command is used repeatedly without using other commands to change the zoom in between, the effect is to toggle between two zoom settings. The **View menu > Previous Zoom** command cannot go back more than one zoom setting. Note that the **View menu > Previous Zoom** command has no effect in the following circumstances:
 - Immediately after the first display of a view in a window.
 - Immediately after the use of the View menu > Pan command.
- **Zoom In One Step,**  This command zooms in on the model one step.



TIP: The **Zoom In One Step** command can also be initiated by using the **Shift+F2** command.

- **Zoom Out One Step,**  This command zooms out on the model one step.

TIP: The **Zoom Out One Step** command can also be initiated by using the **Shift+F3** command.

Note: Using mouse we can perform zoom in and out by scrolling the roller to and fro respectively

PAN

The pan feature can be used to move a view within the window such that the area beyond an original edge of the view is included in the display.

Click the **View menu > Pan** command or the Pan toolbar button, to pan a view. After the menu command or toolbar button has been clicked, click and hold down the left mouse button in the view and drag the mouse (while still holding down the left mouse button) to pan the view.

TIP: The **Pan** command can also be initiated by using the **F10** Command.

The menu command or toolbar button must be re-clicked every time panning is performed. That is, once the left mouse button is released, the command is deactivated; a further movement of the view requires reuse of the command or toolbar button.


Note: Using mouse we can perform pan holding the mouse scroller button


ROTATE 3D VIEW

To use this first open default 3d view by using following procedure

Set 3D View

Click the **View menu > Set 3D View** command or the toolbar button to access the Set 3D View form and set the window to a three-dimensional (3D) view. Use the Set 3D View form to define the **View Direction Angle** by specifying a plan angle, elevation angle and an aperture angle. All angles are specified in degrees. The view direction defines the location from which an observer would view the building from the outside.

TIP: The **Set 3D View** form can be brought up quickly either using the **Shift+Ctrl+F3** command or by clicking the  icon from the ETABS toolbar.

When the active window is showing a 3D view, click the  **Rotate the 3D View** toolbar button and use the mouse to adjust the view direction. After the button is clicked, left-click the



mouse in the window with the 3D view and while holding down the mouse left button, drag the mouse to adjust the view direction. Note that as soon as the mouse is left-clicked in the window with the 3D view, a bounding box (dashed lines enclosing the model) appears and that as the mouse is dragged, the orientation of the bounding box changes, showing the new orientation of the model. When the left mouse is released, the entire model is redrawn in the new view direction.

Note: Using the mouse we can perform 3D rotation by holding the mouse scroller button & shift key in the keyboard drag the cursor to specify the rotation and finally after getting required orientation release it.