Extended Three-Dimensional Analysis of Building System

ETABS

Select Menu

SELECT MENU

Objective

This chapter contains an explanation on Tools in Select Menu.

Select menu consists of various selection tools which are as listed below.

Select - Pointer/Window

Use the **Select menu >Pointer/Window** command or the Select Object button to select objects in the model by left clicking on them in the active window. A window is active when the blue title bar at the top of the window is highlighted. Selected objects are indicated by dashed lines.

Note: If multiple objects lie one on top of the other, hold down the **Ctrl key** on the keyboard and left click on the objects. The Selection List form will display; highlight the ID for the object(s) to be selected. Use the **Ctrl key** while left clicking to select multiple objects.

Note: Only objects that are present in the active display window can be selected. For example, if the display of Floors has been turned off in the active window, windowing around a portion of the structure that contains those areas will NOT select them. Other, non-graphical selection methods are not restricted by the visibility of the areas (see the other options on the Select menu).

- **Pointer.** Each mouse click on an object selects or deselects the object. Only a single object at a time can be selected/deselected using the Pointer selection. When in Select mode, Pointer selection/deselection is always available. Use the Selection List form when multiple objects are present within the screen selection tolerance of the mouse click.

  Tip: It is sometimes easier to select a single point object by drawing a window around it rather than trying to click on it.

- **Window.** Draw a window around one or more objects to select them. Draw a window around an object as follows:

1. Position the mouse pointer above and to the left (or below and to the right) of the object(s) to be selected by windowing.
2. Depress and hold down the left button on the mouse.
3. While keeping the left button depressed, drag the mouse to a position below and to the right (or above and to the left) of the object(s) to be selected.
4. Release the left mouse button.

   Tip: If the mouse moves from left to right while dragging, only objects completely inside the window are selected. If the mouse moves from right to left while dragging, objects fully or partially inside the rectangle will be selected. Dragging from top to bottom or bottom to top does not affect selection.

   Note: Window selections are additive. Objects in the selection window that were previously selected will stay selected.

   Note: Selecting by window in a plan view selects the beams and columns that are visible in the plan.

   Objects can also be deselected in Window. To deselect by window, click the **Select > Deselect > Pointer/Window** command and then draw the selection window as described above. The command must be used each time an object or set of objects is to be

deselected. Selection/deselection in Window is not available if the following commands were used:
- o Select > Deselect > Pointer/Window
- o Select > Select > Intersecting Line
- o Select > Deselect > Intersecting Line

After performing a single selection or deselection using one of these commands or any of the other selection/deselection methods on the Select menu, the program automatically returns to selection in Window.

Poly

Use the **Select menu > Select > Poly** command to select objects by clicking the left mouse button in the active window to enclose the objects within a poly shape. Note that the lines defining the poly shape cannot cross or intersect.

1. Click the **Select menu > Select > Poly** command to enable the Poly Select mode.
2. Click in the active window to begin selecting the target objects.
3. Move the mouse to the next location and click the left mouse button to draw the first side of the poly shape. Continue clicking in the active window at any number of points to enclose the object(s) to be selected within the lines defining the poly shape. As noted above, the lines defining the poly shape cannot cross or intersect.
4. Exit the Poly Select mode by double clicking the left mouse button. Any objects fully within the poly-shaped area will be selected. Note that using the **Esc** key will cancel the selection, rather than exit the Poly Select mode.

TIP: The Poly Select command may also be actived by using the **Shift**+**Ctrl**+**O** hot key command.

Intersecting Line

The intersecting line selection features selects one or more objects by drawing a line through them. Use the feature as follows:

1. Click the **Select menu > Select > Select Using Intersecting Line** command or the Set Intersecting Line Select Mode button, .
2. Draw the intersecting line as follows.
    a. Position the mouse pointer to one side of the object(s) you want to select.
    b. Depress and hold down the left button on your mouse.
    c. While keeping the left button depressed, drag the mouse across the object(s) to be selected.
    d. Release the left mouse button.

Note the following about the intersecting line selection method:

As the mouse is dragged, a "rubber band line" appears. The rubber band line is a dashed line that changes length and orientation as the mouse is dragged. It extends from the point where the left mouse button is first depressed to the current mouse pointer position. Any visible object that is intersected (crossed) by the rubber band line when the left mouse button is released is selected.

The **Select menu > Select > Select Using Intersecting Line command** or the Set Intersecting Line Select Mode button, must be clicked every time the selection method is to be used even if several objects are to be selected in succession using this method.

TIP: The Intersection Line Select command may also be actived by using the **Shift+Ctrl+L** hot key command.

Intersecting Poly

Use the **Select menu > Select > Intersecting Poly** command to select objects by clicking the left mouse button in the active window to delineate a poly shape. Objects are selected when the lines of the poly shape enclose them as well as when the lines defining the poly shape intersect with them. Note that the lines defining the poly shape cannot cross or intersect with each other.

1. Click the **Select menu > Select > Intersecting Poly** command to enable the Intersecting Poly Select mode.
2. Click in the active window to begin selecting the target objects.
3. Move the mouse to the next location and click the left mouse button to draw the first side of the poly shape. Continue clicking in the active window at any number of points to enclose the object(s) to be selected within the lines defining the poly shape or to intersect the lines defining the poly shape with the object(s) to be selected. As noted above, the lines defining the poly shape cannot cross or intersect with each other.
4. Exit the Intersecting Poly Select mode by double clicking the left mouse button. Any objects fully within the poly-shaped area or that intersect with the lines defining the poly shape will be selected. Note that using the Esc key will cancel the selection, rather than exit the Intersecting Poly Select mode.

TIP: The Intersecting Poly command may also be actived by using the **Shift+Ctrl+P** hot key command.

COORDINATE SPECIFICATION

- **Click Joint in XZ Plane**

Click the **Select menu > Select > Coordinate Specification > Click Joint in XZ Plane** command and then click on a single point object. This selects all objects (point, line and area) that are in the same XZ plane as the selected point. An object must lie entirely in the associated plane to be selected

- **Click Joint in YZ Plane**

Click the **Select menu >Select > Coordinate Specification > Click Joint in YZ Plane** command and then click on a single point object. This selects all objects (point, line and area) that are in the same YZ plane as the selected point. An object must lie entirely in the associated plane to be selected.

- **Click Joint in XY Plane**

Click the **Select menu > Select > Coordinate Specification > Click Joint in XY Plane** command and then click on a single point object. This selects all objects (point, line and

area) that are in the same XY plane as the selected point. An object must lie entirely in the associated plane to be selected.

Object Type

The **Select menu > Object Type** command selects columns, beams, braces, null lines, walls, floors, or null areas. Note that openings are a subset of null areas.

1. Click the **Select menu > Object Type** command to access the Select Object Type form.
2.   Highlight the name of the object in the list.
3. Click the Select button (or the Deselect) button.

Material Properties - Select

Form: Select by Material Property

Use the **Select menu > Select > Properties > Material Properties** command to select objects based on their material property definitions.

1. Click the **Select menu > Select > Properties > Material Properties** command to display the Select by Material Property form.
2. Click to select one or more of the previously defined material properties. Use the **Shift** and **Ctrl** keys to make multiple selections.
3. Click the Select or Deselect button. All objects assigned the chosen material property (ies) will be selected.

    The form will remain open until the Close button is clicked, so that another selection can be made if necessary

Frame Sections

Form: Select by Frame Property

The **Select menu > Select > Properties > Frame Sections** command selects line objects based on their assigned frame sections.

1. Click the **Select menu > Select > Properties > Frame Sections** command to access the Select by Frame Property form.
2. Highlight the name of the frame section to be selected in the list.
3. Click the Select or Deselect button. The form will remain open until the **Close** button is clicked, so that another selection can be made if necessary.
4. Use the Filter edit box to limit the list to make selection of the frame property easier. Use the Clear Filter button to restore the full list of frame properties.

Slab Sections

Form: Select by Slab Property

The **Select menu > Select > Properties > Slab Sections** command selects area objects based on the assigned slab section property.

1. Click the **Select menu > Select > Properties > Slab Sections** command to access the Select by Slab Property form.
2. Highlight the name of the slab section in the list.

3. Click the Select or Deselect button. The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

Deck Sections

Form: Select by Deck Property

The **Select menu > Select > Properties > Deck Sections** command selects area objects based on the assigned deck section property.

1. Click the **Select menu > Select > Properties > Deck Sections** command to access the Select by Deck Property form.
2. Highlight the name of the deck section in the list.
3. Click the Select or Deselect button. The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

Wall Sections

Form: Select by Wall Property

The **Select menu > Select > Properties > Wall Sections** command selects area objects based on the assigned wall section property.

1. Click the **Select menu > Select > Properties > Wall Sections** command to access the Select by Wall Property form.
2. Highlight the name of the wall section in the list.
3. Click the Select or Deselect button. The form will remain open until the **Close** button is clicked, so that another selection can be made if necessary.

Link/Support Properties

Form: Select by Link Property

The **Select menu > Select > Properties > Link/Support Properties** command selects objects based on link assignments.

1. Click the **Select menu > Select > Properties > Link/Support Properties** command to access the Select by Link Property form.
2. Highlight the name of the link in the list.
3. Click the Select or Deselect button. The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

Point Springs

Form: Select by Point Spring Property

Use the **Select menu > Select > Properties > Point Springs** command to access the Select by Point Spring Property form and select point objects based on their point spring property assignments. Highlight one or more of the previously defined point spring properties, click the Select (or Deselect button), and all of the point objects assigned the chosen properties will be selected (or deselected).

The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

Release the selected object(s) using any of the following commands:

- o Select menu > Clear Selection command

      o Clear Selection button

      o Select menu > Deselect > Properties > Line Springs command

Line Springs

Form: Select by Line Spring Property

Use the **Select menu > Select > Properties > Line Springs** command to access the Select by Line Spring Property form and select frame objects based on their frame spring property assignments. Highlight one or more of the previously defined frame spring properties, click the Select (or Deselect) button, and all of the line objects assigned the chosen properties will be selected (or deselected).

The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

Release the selected object(s) using any of the following commands:

- Select menu > Clear Selection command

- Clear Selection button

- Select menu > Deselect > Properties > Line Springs command

Area Springs

Form: Select by Area Spring Property

Use the **Select menu > Select > Properties > Area Springs** command to access the Select by Area Spring Properties form and select area objects based on their area spring property assignments. Highlight one or more of the previously defined area spring properties, click the Select button (or Deselect button) and all of the area objects assigned the chosen properties will be selected.

The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

Release the selected object(s) using any of the following commands:

- Select menu > Clear Selection command.

- Clear Selection button

- Select menu > Deselect > Properties > Line Springs command.

Spandrel Labels

Form: Select by Spandrel Label

The **Select menu > Select > Labels > Spandrel Labels** command selects objects previously specified to be spandrels.

1. Click the **Select menu > Select > Labels > Spandrel Labels** command to access the Select by Spandrel Label form.
2. Select the Story level of the spandrels to be selected.
3. Highlight the name of the spandrels to be selected in the list.
4. Click the Select or Deselect button. The form will remain open until the Close button is clicked so that additional selections can be made if necessary.

Pier Labels

Form: Select by Pier Label

The **Select menu > Select > Labels > Pier Labels** command selects objects previously specified to be piers.

1. Click the **Select menu > Select > Labels > Pier Labels** command to access the Select by Pier Label form.
2. Select the Story level of the piers to be selected.
3. Highlight the name of the Piers to be selected in the list.
4. Click the Select or Deselect button. The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

Joint Labels

Form: Select by Joint Label

The **Select menu > Select > Labels > Joint Labels** command selects objects previously specified to be joints.

1. Click the **Select menu > Select > Labels > Joint Labels** command to access the Select by Spandrel Joint form.
2. Select the Story level of the joint(s) to be selected.
3. Highlight the name of the join(ts) to be selected in the list.
4. Click the Select or Deselect button. The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

Shell Labels

Form: Select by Shell Label

The **Select menu > Select > Labels > Shell Labels** command selects objects previously specified to be shells.

1. Click the **Select menu > Select > Labels > Shell Labels** command to access the Select by Shell Label form.
2. Select the Story level of the shell(s) to be selected.
3. Highlight the name of the shell(s) to be selected in the list.
4. Click the Select or Deselect button. The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

TIP: The Draw menu > Auto Draw Cladding command can be used to add shell objects around the outermost perimeter of the building. Those objects can then be selected using this command on a face-by-face basis (e.g., A1, A2, A3, A4) before using the Assign menu > Shell Loads > Wind Pressure Coefficient command to assign wind load.

Joint Unique Names

Form: Select by Joint Unique Name

The **Select menu > Select > Labels > Joint Unique Names** command selects objects previously specified to be joints.

1. Click the **Select menu > Select > Labels > Joint Unique Names** command to access the Select by Joint Unique Names form.

2. Use the Filter edit box to limit the list to make selection of the joint easier. Use the **Clear Filter** button to restore the full list of joints.

3. Highlight the name of the joint(s) to be selected in the list.

4. Click the Select or Deselect button. The form will remain open until the **Close** button is clicked, so that another selection can be made if necessary

Frame Unique Names

Form: Select by Frame Unique Name

The **Select menu > Select > Labels > Frame Unique Names** command selects objects previously specified to be frames.

1. Click the **Select menu > Select > Labels > Frame Unique Names** command to access the Select by Frame Unique Names form.

2. Use the Filter edit box to limit the list to make selection of the frame easier. Use the Clear Filter button to restore the full list of frames.

3. Highlight the name of the frame(s) to be selected in the list.

4. Click the Select or Deselect button. The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

Shell Unique Name

Form: Select by Shell Unique Names

The **Select menu > Select > Labels > Shell Unique Names** command selects objects previously specified to be frames.

1. Click the **Select menu > Select > Labels > Shell Unique Names** command to access the Select by Shell Unique Names form.

2. Use the Filter edit box to limit the list to make selection of the shell easier. Use the Clear Filter button to restore the full list of shells.

3. Highlight the name of the shell (s) to be selected in the list.

4. Click the Select or Deselect button. The form will remain open until the Close button is clicked, so that another selection can be made if necessary

Link Unique Name

Form: Select by Link Unique Names

The **Select menu > Select > Labels > Link Unique Names** command selects objects previously specified to be links.

1. Click the **Select menu > Select > Labels > Link Unique Names** command to access the Select by Link Unique Names form.

2. Use the Filter edit box to limit the list to make selection of the link easier. Use the Clear Filter button to restore the full list of links.

3. Highlight the name of the link(s) to be selected in the list.

4. Click the Select or Deselect button. The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

Select by Groups

Form: Select Groups

The **Select menu > Select > Groups command** selects objects previously assigned to groups.

1. Click the **Select menu > Select > Groups** command to access the Select Groups form.
2. Highlight the name of the group to be selected in the list.
3. Click the Select or Deselect button. The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

TIP: The Group Select command may also be actived by using the **Ctrl+G** hot key command.

Stories

Form: Select by Stories

The **Select menu > Select > Stories** command selects objects based on the story to which they were added/drawn/assigned.

1. Click the **Select menu > Select >Stories** command to access the Select by Stories form.
2. Highlight the name of the story to be selected in the list.
3. Click the Select or Deselect button. The form will remain open until the Close button is clicked, so that another selection can be made if necessary.

Select All

The **Select menu > Select > All** command or the Select All button selects *all* objects in the model, including those that may not be visible. Be careful using this command. It does not just select what is showing in a particular window, but rather it literally selects all objects in a model.

TIP: The Select All command may also be actived by using the **Ctrl+A** hot key command.

Deselect

Objects can be deselected one at a time by left clicking on the selected objects. A more powerful way to deselect items is to use the Select menu commands and the Deselect button on the associated form (e.g., the Select menu > Select > Select by Object Type command displays the Select by Object Type form, which has Select, Deselect and Close buttons; select the objects and click the Deselect button).

Alternatively, the **Select menu > Deselect** commands can be used along with the Deselect button. The Deselect commands provide access to most of the selection methods available on the Select menu, except that now they are used to deselect rather than to select. For example, assume that all of the objects in a model except for those in a particular XZ plane are to be selected. To do this, first use the **Select menu > Select All** command and then use the **Select menu > Deselect > XZ Plane** command.

Invert Selection

The **Select menu > Invert Selection** command changes the selection such that the currently selected objects are no longer selected and all objects that are not currently selected are selected.

TIP: The Invert Selection command may also be actived by using the **Ctrl+K** hot key command.

Get Previous Selection

The **Select menu > Get Previous Selection** command or Restore Previous Selection button selects whatever objects were last previously selected. For example, assume you select some line objects by clicking on them and then assign them some frame section properties. You can then use the Select menu > Get Previous Selection command to select the line objects again and assign something else to them such as member end releases.

TIP: The Get Previous Selection command may also be actived by using the **Ctrl+J** hot key command.

Clear Selection

Use the **Select menu > Clear Selection** command or Clear Selection button to clear the selection of all currently selected objects. It is an all or nothing command. You cannot selectively clear a portion of a selection using this command. If you want to selectively clear a selection, left click on the selected objects one at a time or use the deselect tool. You can also use the to clear the entire selection.

TIP: The Clear Selection command may also be actived by using the **Ctrl+Q** hot key command.