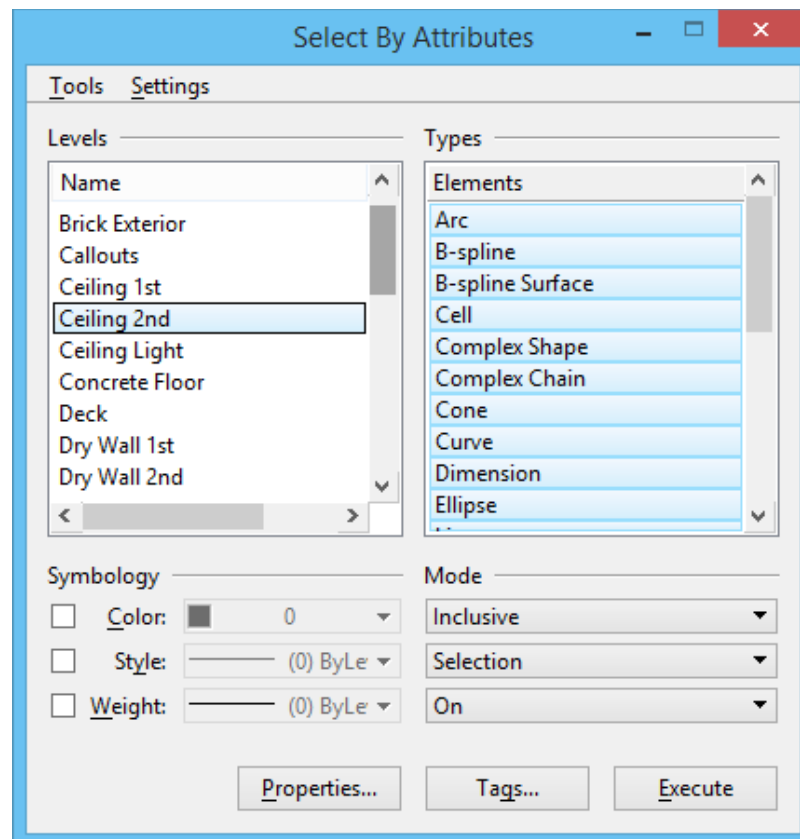# Select By Attributes Dialog

Used to select elements based on specified criteria.

- *Select* elements (in a sense, extend the Element Selection).
- *Locate* elements.
- Filter the elements that are displayed.

Selection criteria can be saved in separate files for reuse.

You can open this dialog from the following:

- Ribbon: **Drawing** > **Home** > **Selection** (This setting is hidden by default)
- Ribbon: **Modeling** > **Home** > **Selection** (This setting is hidden by default)
- Ribbon: **Visualization** > **Home** > **Selection** (This setting is hidden by default)
- Ribbon: **Admin** > **Home** > **Selection** (This setting is hidden by default)

Key-in: `MDL LOAD SELECTBY DIALOG`

 Note: For criteria settings to be effective, the third unlabeled option menu under **Mode** must be set to On.

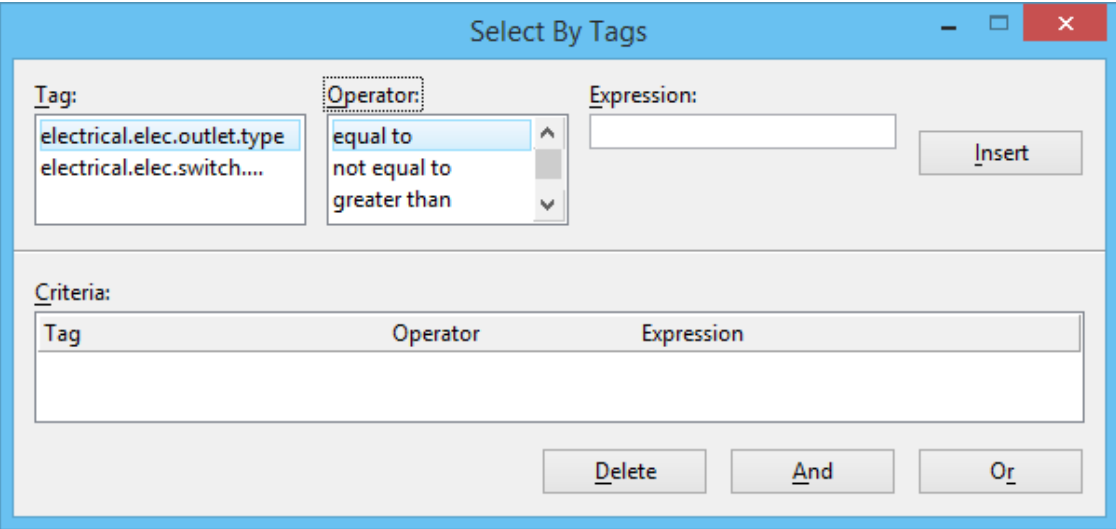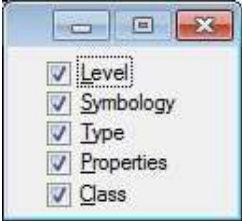**Note:** When you close the Select By dialog, an alert box displays:

- Click **OK** to continue to apply the Select By settings.
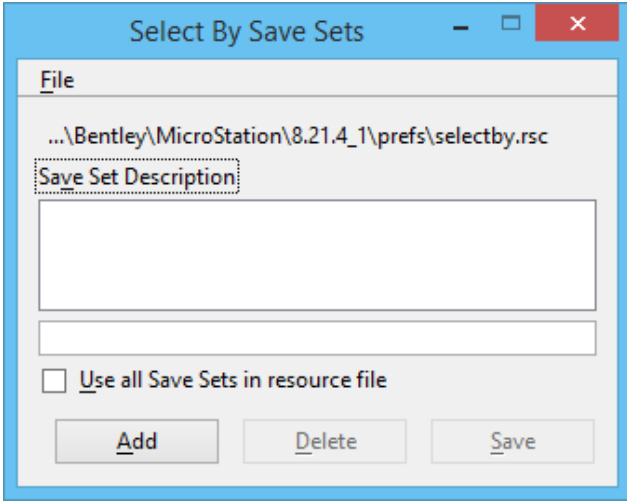- Click **Cancel** to unload the "selectby.ma" MDL application.
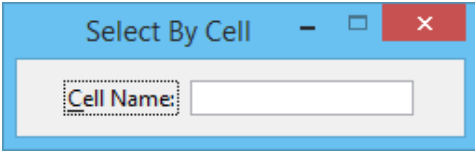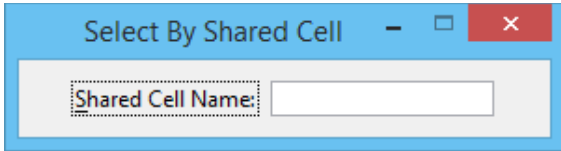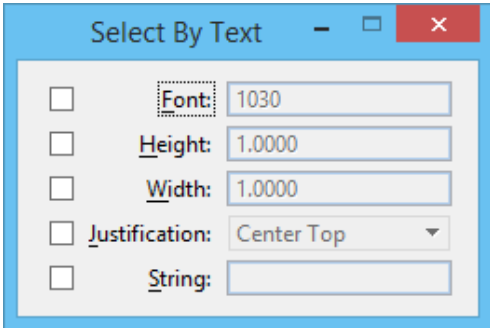
Note: Key-ins must be activated by the key-in SELECTBY EXECUTE. SELECTBY must be loaded (MDL LOAD SELECTBY) and the type cleared by keying in SELECTBY TYPE NONE.

Setting	Description
Levels	Used to specify level criteria. To select a single level, click the level. To select many levels at once, click and drag through the level list. To select non-contiguous levels in the list, **<Ctrl-click>** required levels. To deselect a level, **<Ctrl-click>** the highlighted level. `SELECTBY LEVEL <LEVEL LIST>` Note: Level_list can be as follows: _(see table below)_ Note: The levels section should be cleared before using the key-ins so that no existing selections are included. You can do this with the SELECTBY TYPE NONE key-in.
Types	Used to specify criteria based on element type: To select a single type, click the type. To select many types at once, click and drag through the types. To select non-contiguous types in the list, **<Ctrl-click>** required types. To deselect a type, **<Ctrl-click>** the highlighted type. Element type criteria also can be set with key-ins: _(see table below)_

Form	Examples
List levels by number	SELECTBY LEVEL 2,4,7,9
Range(s) of levels, indicated by hyphen (-)	SELECTBY LEVEL 2-4 SELECTBY LEVEL 2-4,9-15
Level and level group names (The complete level path must be specified for each name that is not unique in the level structure. The colon (:) is the separator character in a level path specification.)	SELECTBY LEVEL plumbing
Select all levels	SELECTBY LEVEL ALL
Deselect all levels	SELECTBY LEVEL NONE

Control	Key-in
(No type criteria)	SELECTBY TYPE NONE
All Types	SELECTBY TYPE ALL
Arc	SELECTBY TYPE ARC
B-Spline	SELECTBY TYPE BSPLINE
B-Spline Surface	SELECTBY TYPE BSPLINESURFACE
Cell	SELECTBY TYPE CELL

Setting	Description
	<table><tr><th>Control</th><th>Key-in</th></tr><tr><td>Complex Shape</td><td>SELECTBY TYPE COMPLEXSHAPE</td></tr><tr><td>Complex Chain</td><td>SELECTBY TYPE COMPLEXSTRING</td></tr><tr><td>Cone</td><td>SELECTBY TYPE CONE</td></tr><tr><td>Curve</td><td>SELECTBY TYPE CURVE</td></tr><tr><td>Dimension</td><td>SELECTBY TYPE DIMENSION</td></tr><tr><td>Ellipse</td><td>SELECTBY TYPE ELLIPSE</td></tr><tr><td>Line</td><td>SELECTBY TYPE LINE</td></tr><tr><td>Line String</td><td>SELECTBY TYPE LINESTRING</td></tr><tr><td>Mesh</td><td>SELECTBY TYPE MESH</td></tr><tr><td>Multi-line</td><td>SELECTBY TYPE MULTILINE</td></tr><tr><td>Raster</td><td>SELECTBY TYPE RASTER</td></tr><tr><td>Raster Attachment</td><td>SELECTBY TYPE RASTERATTACHMENT</td></tr><tr><td>Shape</td><td>SELECTBY TYPE SHAPE</td></tr><tr><td>Shared Cell</td><td>SELECTBY TYPE SHAREDCELL</td></tr><tr><td>Solid</td><td>SELECTBY TYPE SOLID</td></tr><tr><td>Surface</td><td>SELECTBY TYPE SURFACE</td></tr><tr><td>Text</td><td>SELECTBY TYPE TEXT</td></tr><tr><td>Text Node</td><td>SELECTBY TYPE TEXTNODE</td></tr></table> **Note:** Existing selections are not automatically cleared by the key-ins, therefore the Types column should be cleared (not black) before using the above key-ins. You can do this with the SELECTBY TYPE NONE key-in.
Symbology	Used to specify criteria based on element color, line style (including custom line style), and line weight. Element symbology criteria can also be set with key-ins: <table><tr><th>Control</th><th>Key-in</th></tr><tr><td>Color</td><td>SELECTBY COLOR <color></td></tr><tr><td>Style</td><td>SELECTBY STYLE <line_style></td></tr><tr><td>Weight</td><td>SELECTBY WEIGHT <line_weight></td></tr></table> **Note:** Key-ins must be activated by the key-in SELECTBY EXECUTE.
Mode	Three unlabeled option menus control the following:

Setting	Description		
	Option menu	Description	
	Top	Controls which elements are selected, displayed, or located when the Execute button is clicked. • Inclusive — All elements that match search criteria. • Exclusive — All elements that do not match search criteria.	
	Middle	Controls how criteria are used when the Execute button is clicked. • Selection — Elements are selected based on Select By criteria. (To graphically select individual elements, use the Element Selection tool.) • Location — Filters location of elements based on Select By criteria. Elements can then be selected by using the Select All command. • Display — Filters display of elements based on Select By criteria.	
	Bottom	If set to On (the default), Select By criteria is effective. If set to Off, Select By criteria is ignored.	
	`SELECTBY MODE [INCLUSIVE	EXCLUSIVE]`   `SELECTBY OPTIONS [SELECTION	LOCATION	DISPLAY]`		
Execute	Selects, Locates, or Displays elements in accordance with the specified search criteria and Mode. `SELECTBY ON` Note: For criteria settings to be effective, the bottommost Mode option menu must be set to On.		
Properties	Opens the Select By Properties dialog, which is used to specify criteria based on less prominent element attributes, such as area and class. `SELECTBY PROPERTIES`		
Tags	Opens the Select By Tags dialog, which is used to specify criteria based on tag values. If selection criteria based on tag values are specified, elements that do not have attached tags with the specified tag name(s) will not be selected, located, or displayed.		

Setting	Description
SELECTBY TAGS
Tools > Set Select By from Element	Opens the Set Select By dialog, which is used to set the search criteria so they match an element's attributes. <table><tr><th>Control</th><th>Criteria matched if on</th></tr><tr><td>Level</td><td>Levels</td></tr><tr><td>Symbology</td><td>Symbology</td></tr><tr><td>Type</td><td>Types</td></tr><tr><td>Properties</td><td>**Properties**</td></tr><tr><td>Class</td><td>**Class**</td></tr></table> After you turn on the controls for the desired criteria, identify the element whose attributes you want to specify as criteria.
Tools > Selector Save Sets	Opens the **Select By Save Sets dialog** , which is used to save and retrieve sets of search criteria settings.

Setting	Description
Settings > Cell	Opens the Select By Cell dialog, which is used to specify a criterion based on the name of an unshared cell. SELECTBY SETTINGS CELL
Settings > Shared Cell	Opens the Select By Shared Cell dialog, which is used to specify a criterion based on the name of a shared cell. SELECTBY SETTINGS SHAREDCELL
Settings > Text	Opens the Select By Text dialog, which is used to specify criteria based on element attributes specific to text elements. Text strings are case-sensitive. For example, inputting the string "North" would select "North", but not "north", nor "NORTH".

Control	Key-in
Font	SELECTBY TEXTFONT <font>

Setting	Description	

Control	Key-in
Height	SELECTBY TEXTHEIGHT <text_height>
Width	SELECTBY TEXTWIDTH <text_width>
Justification	SELECTBY TEXTJUST <text_justification>
String	SELECTBY TEXTSTRING <text_string>

SELECTBY SETTINGS TEXT

Settings > Text Node	Opens the Select By Text Node dialog, which is used to specify criteria based on element attributes specific to text node elements. Text strings are case sensitive. For example, inputting the string "North" would select "North", but not "north", nor "NORTH".

Control	Key-in
Font	SELECTBY TEXTNODEFONT <font>
Height	SELECTBY TEXTNODEHEIGHT <text_height>
Width	SELECTBY TEXTNODEWIDTH <text_width>
Justification	SELECTBY TEXTNODEJUST <text_justification>
String	SELECTBY TEXTSTRING <text_string>

SELECTBY SETTINGS TEXTNODE