

# **Ez-Architect**

## **User's Guide**

**For Windows Vista and Windows 7 and  
Windows 8 and Windows 10**

**Developed by Infinisys, Ltd.**

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Architect is an easy to use 2-D drawing program designed primarily for creating floor plans and building plans. However, you can also use it for creating any kind of diagram or drawing, or other projects like posters, Christmas and birthday cards, invitations, engineering drawings, inventions, landscaping plans, etc. There's also a new [Ez-Architect Home and Office Library that can be purchased as an optional add-on.](#)

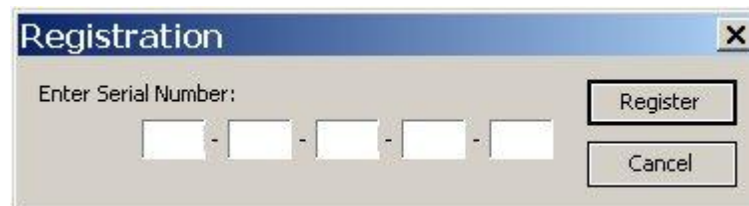
### **Demonstration Version**

Until you enter a valid serial number in the program it will work in demonstration mode. This means that you can't print or save files, or copy or export to other programs, but all other functions work as in the full version.

We offer low prices for extra copies, since each serial number/key is for one copy of the program only. This is an anti-piracy measure.

To convert to a full version you must purchase a serial number from MCS Investments. You will find an Upgrade item in the program's Help menu which will link you to the purchasing information; or you may go to our website: <http://theliquidateher.com/ez-architect.html> to access the Ez-Architect page where you'll find easy ordering instructions. After you make your purchase and receive your serial number, you can enter it in the program by selecting Enter Serial Number from the Help menu. Then you will be able to print, save and utilize all the program's functions. Enter your serial number in the registration dialog:

*Enter Your Registration Number*

A screenshot of a Windows-style dialog box titled "Registration" with a close button (X) in the top right corner. The dialog box has a light gray background. It contains the text "Enter Serial Number:" followed by five empty text input boxes separated by hyphens. To the right of the input boxes are two buttons: "Register" and "Cancel".

## Touchscreen Version



### Touch Panel Operation

Drawing with a finger or a pen on a touch screen is different from drawing with a mouse. You can draw using finger or pen on Windows 8 Tablets, including Microsoft Surface models. Some important points to keep in mind when drawing on a touch screen are explained below.

#### 1. *Snap to Grid*

For greater accuracy when drawing using a touch screen it is helpful to turn on the "Snap to Grid" function. After setting "Grid Spacing" in the "Layout" menu to an appropriate value select "Snap to Grid" in the same menu. It is best to set the "Grid Spacing" to the smallest practical value for the scale that you have set.

#### 2. *Left Click*

Tapping the screen once is the same as doing a left click with the mouse.

#### 3. *Right Click*

A number of operations in Ez-Architect require that you use a right click. When drawing on a touch screen without a mouse other operations are substituted for a right click.

*Color Palette:* Right clicking on a color in the Color Palette sets the colors of lines and text. On a touch screen press on the color for an extended time for the same effect.

*Tools:* Continuous drawing tools, such as the continuous wall tools and the polygon tool, use a right click to finish the drawing operation. With a touch screen this is achieved by tapping quickly twice on the screen.

#### 4. *Double Click*

To perform a double click tap twice on the screen.

#### 5. *Dragging the Mouse*

Dragging the mouse is used to select objects and also to move objects and palettes. On a touch screen this is done by placing a finger or pen on the screen and moving it while keeping it in contact with the screen.

#### 6. *Continuous Drawing Tools* (Continuous Wall tools, Polygon tool etc.)

##### *Method 1* (Dimensions display while drawing.)

Place your finger or pen where you want to commence drawing the object, and, while keeping it in contact with the screen move it to the first vertex or corner. Remove the

pen or finger temporarily from the screen, then replace it and move it to the second vertex or corner. Keep repeating this process and tap twice on the screen to finish.

*Method 2* (Dimensions do not display while drawing.)

Tap on the screen where you want to commence drawing the object. Next tap at the position of the first vertex or corner, then at the position of the second vertex or corner and keep repeating this process. Tap twice to finish.

#### *7. Keyboard Arrow Keys*

Dragging small objects, especially transparent objects, with your finger can be difficult. It is often easier to select them (choose the Arrow tool from the tool bar and then drag your finger over the object) and then use the virtual keyboard arrow keys to move them. As the smaller virtual keyboards lack up and down arrow keys you will need to select the extended keyboard.

#### *8. Handle Size*

When an object is selected small black squares called handles display around it. You can adjust the size of objects by dragging these handles. To make them easier to drag with your finger you can make these handles bigger by changing the "Drag Handle Size" setting in "Preferences" in the "Options" menu.

#### *9. Key Buttons*

The Shift and Ctrl keys on the keyboard are used for some operations in Ez-Architect. The Key buttons at the top right of the screen (only visible when Large Palettes are set) can be used in place of these keys. Tapping the Shift and Ctrl key buttons is the same as holding down the Shift and Ctrl keys. Tapping them again releases them. Tapping the Delete key button deletes any objects that are selected. The Key Buttons do not function when clicked with a mouse. The Assist Key menu can be used in place of the Key Buttons.

#### *10. Magnification and Reduction*

Selecting the Magnifying Glass (Zoom Tool) in the tool bar and then tapping the screen magnifies the drawing. To make the drawing smaller first tap the Ctrl key and then use the Zoom Tool.



## ***Other Features***

### *New Interface*

New interface with color and pattern palettes. Also can choose to display large palettes when using Windows 8 tablets or high resolution screens. This setting can be selected in the Preferences dialog.

### *Compatible with high resolution screens*

Problems with some dialogs not displaying correctly on high resolution screens fixed.

### *New Library Window*

New larger library window which displays multiple rows.

### *Show Only Selected Objects*

New "Show Only Selected Objects" in the Layout menu. Choosing this hides all objects which are not selected. This is useful for printing or exporting only specified parts of the drawing. Choose "Show all objects" in the Layout menu to display the entire drawing again.

### *Object Alignment function*

Four new items in the Arrange menu (Left Alignment, Right Alignment, Top Alignment and Bottom Alignment) allow arrangement of selected objects. First select the items you wish to arrange and then select the desired alignment option.

### *Edit Pattern and Edit Color dialogs*

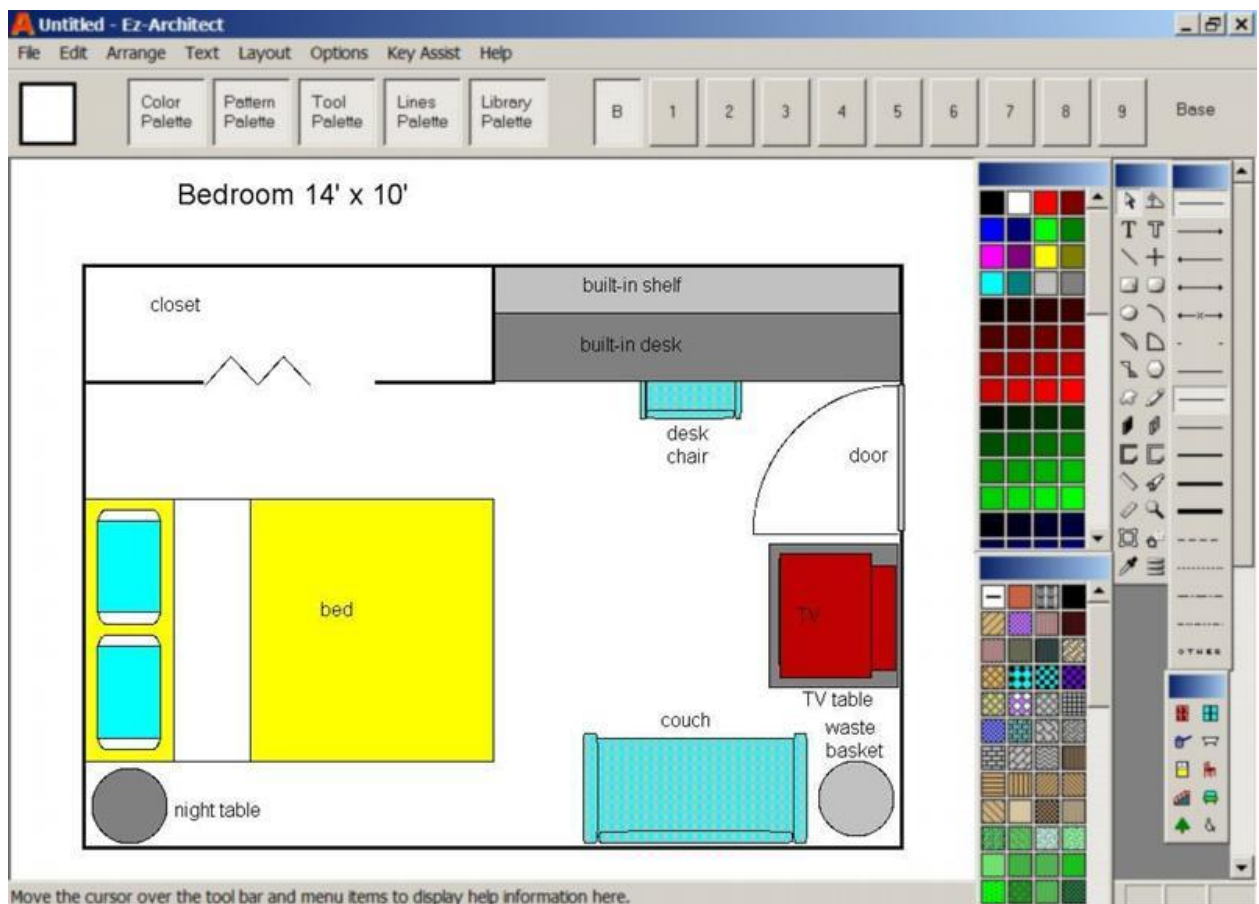
These dialogs can now be displayed by double-clicking on items in the Pattern and Color palettes.

### *Key Buttons*

When Large palettes is set in the Preferences dialog, three Key Buttons display at the top right of the screen. These can be used in place of the keyboard keys when using a tablet. Tapping the Shift and Ctrl key buttons is the same as holding down the Shift and Ctrl keys. Tapping these buttons again releases the keys. Tapping the Delete key button deletes any selected objects. These keys do not work when clicked with a mouse. The Assist Key menu can be used in place of the key buttons.

## How To Try Out *Ez-Architect*

1. Select Drawing Scale on the Layout menu and then click on  $\frac{1}{2}'' = 1'$  which is a scale where items are  $\frac{1}{24}$ <sup>th</sup> real size. While in the Layout menu, click on Show Rulers, Show Ruler Lines, Show Grid, Snap to Grid, and Grid Spacing—where you'll put in 6 inches. If you're not in "Feet & inches" mode, select "Feet & inches" in the Drawing Units selection on the Layout menu.
2. Check out the plan below called bedroom.aad which shows a 14' x 10' bedroom.
3. Use the Wall Tool (fourth tool from the bottom on the left) to create a 14' x 10' room. Add three 2' wall sections to define a closet. Again select Snap to Grid on the Layout menu, but this time turn *off* grid snap.
4. Use the Library Tool (bottom left tool) and drag out a rectangle 7' x 4.5'. Choose the Bedroom.aal file but don't choose "Add object to drawing in original size." Double-click bed like in our picture below and then press the Done button, and place the bed as in our picture.



5. Drag an area about 4' x 2' and double-click sofa3 in the Lounge room.aal objects file, and place the sofa as in our picture. In the same file, after

dragging an area 2' x 2' double-click the TV object, and place the TV as in our picture. Now drag a 2' x 6" area and from the Doors Plan View.aal file double-click the Folding door, and place the door as in our picture. From the same file, after dragging a 2.5' x 2.5' area double-click Door9, and place the door as in our picture.

6. Click the Selector Tool (top left) and click the sofa you've just placed and press Ctrl+C and Ctrl+V to copy and paste. Move the top sofa away from the bottom one and click on a corner handle and drag the object to 21" wide x 17" height. In the picture, it's sticking out from under a desk. Position it there now.

7. Let's make the desk. Click on the Rectangle Tool (4<sup>th</sup> from top left) and then click on dark gray on the palette of colors (16<sup>th</sup> from left). Drag out the 7' x 2' desk right of the closet. Use the Ellipse Tool just under the Rectangle Tool and drag a night table that's 16" in diameter and put it bedside as shown. Copy that by clicking the Selector Tool (top left) and clicking the table you've just placed and press Ctrl+C and Ctrl+V to copy and paste. Move it to where the wastebasket in the picture is shown. While it's still selected, click light gray on the palette and the wastebasket will change color.

8. The desk needs a shelf so let's make it. Click on the Rectangle Tool and drag out the 7' x 9" desk right of the closet and on top of the desk. If we'd made the chair last, so it was put on the plan AFTER the desk, and then tried to position the chair scooted under the desk like in the picture, it would be ON, not UNDER the desk, so we'd need Send to Back on the Arrange menu.

9. Finally, the TV needs a TV table since it's sitting on the floor. Select the Rectangle or Round Rectangle Tool (to the right of the Rectangle Tool). Drag the rectangle around the TV until it's completely covered. With the new table still selected, choose the Send to Back option on the Arrange menu. The TV will be ON rather than UNDER the table now.

10. If you wish, click the Selector Tool (top left) and then go to each object, double-click it, and enter a name for it like "bed" or "desk chair." These will show up when you choose OBJECT PROPERTIES.

11. You may label your objects with text with the Text Tool (second from top left). After clicking on it, move to each object and drag an area for the label and then type it in.

## Toolbars

### Object Handles

When you click on any object small black squares will appear. These are resizing handles that you can use to resize the object. To resize click on a handle and drag the mouse. You can set the default size of these handles in the Preferences dialog in the Options menu.

### Special Handles

Most closed objects (rectangles, circles, polygons etc) possess special handles that can be used to reshape an object. To access these handles click on the object while holding down the Shift key. Drag any handle to reshape the object.



## DRAWING TOOLS TOOLBAR

The toolbar appears on the left side of the drawing screen. Select a tool by clicking its icon. Position the pointer over a tool to display a tool tip. You'll also see hints on using the tools at the bottom of the main window (the status bar) when the mouse hovers over the tool.



### Mouse Pointer

Use the mouse to select a particular object. You can resize the object by clicking on one of the object's handles and dragging the mouse. (Or use the option to draw objects with two mouse clicks instead of dragging - just turn this option on in the Preferences dialog.) Move the object by left-clicking and holding the mouse pointer anywhere within the object and dragging the mouse. You can select multiple objects by clicking on any free area (without

objects) and dragging the mouse to surround the objects you want to select with the selection rectangle. Objects partially inside the selection rectangle will also be selected. You can also select multiple objects by holding the Ctrl key down while you click on each object. Keep the Ctrl key pressed as you click.



### Rotation Tool

You can freely rotate objects with this tool. Click anywhere on the object and hold down the left mouse button. When you move the mouse horizontally, the speed of rotation increases; if you move it vertically the speed decreases. Objects rotate around their centers.



### Text

Use the text tool to input normal text. Click the text tool and then drag the mouse while holding down the left button to define the text area. Next, type your text inside the area you've defined. You'll want to choose the Font item from the Text menu to display a standard Windows font dialog which allows you to set the font, size, color, style, etc. of the text you will use. You can also input text with one click without dragging out a text area box. This will set a text area about 20 characters long and one line in depth.

To edit an existing Text Object click on it after selecting the text tool and make your changes. The size of the text area can be changed by clicking on the text object and then dragging the handles.

To apply a pattern to normal text, select the text object and then click on one of the pattern boxes at the top of the window. If you wish to apply color *and* a pattern, select your pattern first, then apply color, as follows. **NOTE: If you use any patterns on your plan and then switch to the Text tool and type in text, once you click elsewhere or choose a different tool, you'll notice the last pattern you used will be applied to the text. This may make it hard to read, so to get the text back to standard black text with no pattern, simply select the text with the Mouse Pointer (upper left tool) and RIGHT click on the first color (black) on the color bar and then click elsewhere.**

To apply a texture to vector text, select the text, go to Object Properties, click Texture, then Assign Texture, select a bitmap in your file system, then click OK and OK again.

To apply color to the text pattern, select the text object, hold down the Ctrl key and click on the color boxes using the left or right mouse button. You can apply color to both the figure and ground of the pattern, thus eliminating all black and white portions of the pattern, if you wish. Ctrl+left button will change one of the colors, Ctrl+right button will change the others.

To apply color to text, select the text object and click on one of the color boxes at the top of the window using the right mouse button.

To apply color to the text background, select the text object and click on one of the color boxes at the top of the window using the left mouse button.



## Vector Text

Use the vector text tool to input vector text. Vector text differs from normal text in the following ways:

- It can be freely resized using the resize handles. (With normal text these handles resize the work area not the text itself).
- It can be rotated using the Rotation Tool.

You can apply color and patterns to vector text the same as you do for normal text. (See the previous section.)



## Line Tool

Drag the mouse to draw a straight line. Hold down the Shift key to constrain the line horizontally, vertically or at 45 degree angles.

This tool supports auto dimension lines – set this up in the Preferences dialog. You can set the position of the lines, whether or not they should be grouped with the object, and whether or not the width of the auto-dimension lines should be the default one pixel width or conform to the current line width setting.



## Angle Line

Use this tool to draw lines constrained to the following angles : 0, 45, 90, 135, 180, 225, 270, 315 degrees. This tool doesn't support auto dimension lines. But you can click on Scale and then drag a line parallel to your line, noting the dimensions shown. The dimension will not stay there.



## Rectangle

Drag the mouse to draw a rectangle. Hold down the Shift key to constrain the rectangle to a square. Use this for not only drawing floor plan floors but also in building furniture objects, since most contain rectangles.

*USE THIS TOOL ALSO FOR DRAWING ALL BOARDS, INCLUDING PLYWOOD, STUDS, JOISTS, RAFTERS, DECKING, ETC. ALSO USE IT OR HOLLOW WALL OR CONTINUOUS HOLLOW WALL FOR WALLS IF YOU NEED WALLS THAT SCALE CORRECTLY. IT'S CONVENIENT TO USE THE HOLLOW WALL TOOL OR CONTINUOUS HOLLOW WALL TOOL FOR WALLS, AS ALL WALLS WILL BE OF A PRE-SET (IN PREFERENCES) THICKNESS AND CAN BE DRAGGED TO ANY ANGLE. E.g., studs = 3.5" and drywall = .5" so standard U.S. interior wall = 4.5".*

Happily, if you need to make a row of parallel boards, such as studs, you need only create one board, place it where it belongs, and then click on the Select Tool and select your board, and then click the Duplicate Tool, where you can specify the on-center offsets and number of duplications. If you're not sure of how many, set the number of duplicates to 1 and press Ctrl+D repeatedly until you have enough.

The reason to use the Rectangle Tool rather than the Wall Tool is that it gives fully

scalable rectangular objects with both thickness and length scaling. Feel free to select your board and click a color in the color palette so it looks more boardish. Then use the Duplicate Tool for a row of colored boards.

The Wall Tool allows you to draw wall-like 3-pixel-wide lines *at any angle* without need for use of the rotation tool.

The Hollow Line Tool allows you to draw scaleable colored or patterned wall-like rectangles *at any angle* without need of the rotation tool, and with pre-set (in Preferences) thicknesses.

The Hollow Wall Tool allows you to draw scaleable colored or patterned wall-like rectangles *at any angle* without need of the rotation tool, and with pre-set (in Preferences) thicknesses, and you get to choose from 4 different wall ends.

The Rectangle tool creates wall-like or board-like rectangles that are parallel to the page sides—no angles except 90 degrees.

YOU NEED TO USE THE ROTATION TOOL ON RECTANGLES MADE WITH THE RECTANGLE TOOL IN ORDER TO POSITION THEM AT ANGLES.

This tool supports auto dimension lines – set this up in the Preferences dialog. You can set the position of the lines, whether or not they should be grouped with the object, and whether or not the width of the auto-dimension lines should be the default one pixel width or conform to the current line width setting.



### **Rounded Rectangle**

Drag the mouse to draw a rounded rectangle. Hold down the Shift key to constrain the rectangle to a square. This tool is handy for design work or for creating furniture.

This tool supports auto dimension lines – set this up in the Preferences dialog. You can set the position of the lines, whether or not they should be grouped with the object, and whether or not the width of the auto-dimension lines should be the default one pixel width or conform to the current line width setting.



### **Ellipse**

Drag the mouse to draw an ellipse. Hold down the Shift key to constrain the ellipse to a circle.



### **Arc**

Drag the mouse to draw an arc. Hold down the Shift key to constrain the arc to a section of a circle. After drawing the arc you'll see a dialog where you can set the angle of the arc. If you click OK in the dialog without setting the angle, the arc will remain at the angle that you drew it.



### **Arc Tangent**

This tool draws an arc and joins its two ends with a line. This works same as the arc tool.

See above for setting the angle.



### **Arc Pie**

This tool draws a pie section. This works same as the arc. See the arc tool section, above, for setting the angle.



### **Polygon**

Click the left mouse button to define the vertexes of the polygon. Click the right button to close the polygon.



### **Regular Polygon**

This tool draws a regular polygon. Drag the mouse to define the overall size of the polygon, and then input the number of sides in the dialog that displays.



### **Closed Curve**

Works like the Regular Polygon tool, only with rounded edges. Click the right button to close the polygon.



### **Free-Hand Drawing**

This tool allows you to draw freehand. The figures drawn will not close automatically. But you may draw them as closed figures.



### **Wall**

This tool draws straight, bold black wall lines of a thin, unchangeable thickness. It's the perfect tool for sketching out floor plans where the thickness of the wall is not important but the length and rotation angle IS important. Walls are 3 pixels thick, which is thick enough to look like a wall and regardless of the scale, it will always be 3 pixels thick.

Choose Preferences from the Options menu to change the wall preferences. You may use Round, Triangle, or Square ends for corners if you like, but these will add length and may confuse you since the extra length is for dealing with corners. However, if you use Flat wall ends, all lengths are what you'd expect.

Preference changes, like wall ends, only apply to objects you draw after changing your preferences.

The only reason to use the Hollow Wall Tool instead of the Wall Tool is because it gives you *colored or patterned* wall-like lines of a set (in Preferences) *thickness* and Hollow Wall Tool objects' thicknesses will scale.

The only reason to use this tool instead of the Rectangle Tool (which gives fully scaleable rectangular objects with both thickness and length scaling) is that it allows you to



draw wall-like lines *at any angle* without need for use of the rotation tool. The Rectangle tool creates wall-like or board-like rectangles that are parallel to the page sides—no angles. You need to use the Rotation Tool on rectangles made with the Rectangle Tool in order to position them at angles.

The reason NOT to use the Wall Tool is if you want fully scalable (including thickness) wall-like objects that adjust correctly to scale changes. If so, just choose the Rectangle Tool or Hollow Wall Tool.

There's no way to change the thickness of walls drawn with the Wall Tool.

This tool supports auto dimension lines – set this up in the Preferences dialog. You can set the position of the lines, whether or not they should be grouped with the object, and whether or not the width of the auto-dimension lines should be the default one pixel width or conform to the current line width setting.

### Wall Dimension Lines

Select a wall (*must* have been made with the Hollow Wall Tool or Wall Tool, but **not** either of the Continuous wall tools since they make objects of more than one wall) and then Ctrl+Click the Measuring (a.k.a. Scale) Tool and the program will draw a dimension line parallel to the wall, above or below depending on your settings in Preferences. If you wish to use a particular font in your dimension line, change your text settings prior to using this procedure.

This program supports auto dimension lines – set this up in the Preferences dialog. You can set the position of the lines, whether or not they should be grouped with the object, and whether or not the width of the auto-dimension lines should be the default one pixel width or conform to the current line width setting. If auto dimension lines is off in Preferences, you need to Ctrl+Click on Scale to get a dimension line on selected walls, but if auto dimension lines is on, most line-related objects get a dimension line *as they're drawn*, including continuous wall tool walls. Note that to get auto-dimension with continuous wall tool walls, auto-dimension lines *must* be set to on since if you try to use this feature from the Scale Tool it will not work since to use Scale you have to be able to select ONE line and continuous wall tool walls are not individually selectable.



### Hollow Wall

Draws colored hollow walls AT ANY ANGLE that scale up and down correctly. Use Rectangle Tool to draw walls are any thickness you choose to drag it to, without having to set anything up in Preferences.

You can change the default Hollow Wall thickness in the Preferences dialog—a good choice is 4.5 inches. Preference changes will apply to new objects you draw after you change your preferences. You can use one thickness and draw all exterior walls, then change the thickness in Preferences and draw all interior walls, for instance.

Wall color and line color/thickness can be changed as for other objects. **Wall ends can be changed as for the normal wall tool, but you'll normally want to leave this set to Flat.** With Flat wall ends, wall segments are exactly the length you want. With square, round, or triangle ends, they're longer so that things meet more cozily at corners.

This throws off measurements. Wall either have extra studs at corners for corner building, or one wall overlaps the other.

This tool supports auto dimension lines – set this up in the Preferences dialog. You can set the position of the lines, whether or not they should be grouped with the object, and whether or not the width of the auto-dimension lines should be the default one pixel width or conform to the current line width setting.



### **Continuous Wall**

Use this tool to draw continuous straight, bold black wall lines AT ANY ANGLE of a thin, unchangeable, 3-pixel thickness. It's the perfect tool for sketching out floor plans where the thickness of the wall is not important but the length and rotation angle IS important.

Use left click for the start of the first wall, and left click for each change of direction, and use right click to signify you are done. Hold down Shift as you go to get line angles constrained to the following angles : 0, 45, 90, 135, 180, 225, 270, 315 degrees.

This tool supports auto dimension lines IF auto dimension lines is set to on in the Preferences dialog. You can set the position of the lines, whether or not they should be grouped with the object, and whether or not the width of the auto-dimension lines should be the default one pixel width or conform to the current line width setting.

See the Wall Tool info above for more on when to use this tool and when not to.



### **Continuous Hollow Wall**

Draws continuous, colored or patterned hollow walls AT ANY ANGLE that scale up and down fine. You can change the default Hollow Wall thickness in the Preferences dialog—a good choice is 4.5 inches.

Use left click for the start of the first wall, and left click for each change of direction, and use right click to signify you are done. Hold down Shift as you go to get line angles constrained to the following angles : 0, 45, 90, 135, 180, 225, 270, 315 degrees.

This tool supports auto dimension lines IF auto dimension lines is set to on in the Preferences dialog. You can set the position of the lines, whether or not they should be grouped with the object, and whether or not the width of the auto-dimension lines should be the default one pixel width or conform to the current line width setting.

See the Hollow Wall Tool info above for more on when to use this tool and when not to.



### **Hollow Line**

Use this tool to create a thick Hollow line AT ANY ANGLE, which you can fill with color or patterns. You can change the default Hollow Line thickness in the Preferences dialog. Preference changes will apply to new objects you draw after you change your preferences. If you have selected a text background color and then draw a hollow line, that same background color will fill the line.

The only reason to use this tool instead of the Wall Tool is because it gives you *colored or patterned* wall-like lines of a set (in Preferences) *thickness*, but you're generally better off doing walls with the Hollow Wall Tool. OR you may use the Hollow Line Tool for exterior walls and the Hollow Wall Tool for interior walls after first setting hollow line and hollow wall thickness in Preferences.

The only reason to use this tool instead of the Hollow Wall Tool is that you'll always get the length you expect with the Hollow Line Tool, but with the Hollow Wall Tool you may get extra length at each end of the dragged object if the Wall Ends, in Preferences, are NOT set to Flat.

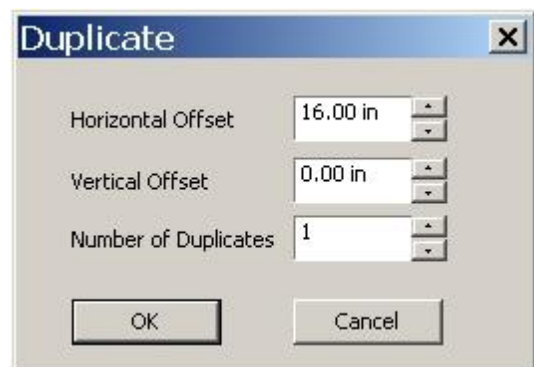
The reason NOT to use this tool is if you want the option to use ctrl-click with the Scale Tool to get an auto-dimension line, which won't work since these are lines, not walls.

This tool supports auto dimension lines – but only if they're set to on in the Preferences dialog. You can set the position of the lines, whether or not they should be grouped with the object, and whether or not the width of the auto-dimension lines should be the default one pixel width or conform to the current line width setting.



### Duplicate Tool

With this tool you can draw rows of rectangles that simulate studs for walls, ceiling joists, floor joists, paneling, decks, floor or roof or wall plywood, etc. Simply use the Rectangle Tool to create one board, correctly placed, of the correct width and length, and then click the Selector Tool. Now click on your board and then on the Duplicate Tool. You'll get a dialog that allows you to set horizontal and/or vertical offsets as well as the number of duplicates to create. This is the perfect stud tool, joist tool, rafter tool, decking placer, plywood placer, etc. Or use it to create a row of shelves against a wall, a row of trees in your yard—or whatever. The Duplicate Tool creates rows or column of boards or any other type of objects.



Once created, if you need your row of objects to be at an angle rather than parallel to the page sides, simply hold down the Ctrl key as you click on each object in the row, then select Group on the Arrange menu. Now click the Rotation Tool, then click on one of the grouped objects and drag the mouse to rotate the entire row of objects.

Once you have the horizontal and vertical offsets set as you want in the Duplicate Tool, simply pressing Ctrl+D will duplicate with no dialog needed. You might wish to set the number of duplicates to 1 and simply press Ctrl+D repeatedly to get correctly spaced boards/objects. That way you need not know the number in the row. Just press Ctrl+D until you have enough.



### Measuring (Scale) Tool

Use this tool to measure the distance between any two positions in your drawing. Click the tool then click a starting point and drag the mouse to the second point. A line is displayed that shows the measurement. The line and the measurements disappear when you release the mouse button. The measurements you see will be based on the scale you have set for

your drawing. Go to the Options menu and use both the Drawing Scale and Drawing Units options to make your measurements meaningful. (See the sections further on in this manual for instructions on setting scale and units for your drawing.)

If your Preferences settings are that auto-dimension lines are ON, you can select a wall (*must* have been made with the Hollow Wall Tool or Wall Tool, but **not** either of the Continuous wall tools since they make objects of more than one wall) and then Ctrl+Click the Measuring (a.k.a. Scale) Tool and the program will draw a dimension line parallel to the wall, above or below depending on your settings in Preferences. This is handy if you wanted dimension lines but forgot to turn them on in Preferences before drawing walls. It's also a great way to find out a wall dimension.



### **Magnifier**

Use this tool is to zoom in or out. Use the left mouse button to zoom in and use the right mouse button to zoom out. Or you can conveniently use the Ctrl key: use left mouse to zoom in, Ctrl + left mouse to zoom out. Use the right mouse button to zoom out and Ctrl + right mouse button to zoom in.



### **Library / Image Tool**

Use this tool to import graphics or to select objects from the libraries. First select the Library / Image Tool and then drag the mouse to outline the size of the object you wish to paste into the drawing. **Note:** You will be able to change the size of the image after you import it. When you release the mouse button, an Open File dialog will display. (*AN EVEN BETTER WAY OF GETTING TO LIBRARY OBJECTS IS THROUGH THE LIBRARY BUTTONS TO THE RIGHT OF THE DRAWING TOOLS TOOLBAR. SEE LIBRARY BUTTONS, BELOW.*)

### **Library Files**

From the dialog go to the Library file located in the Ez-Architect folder on your computer, or access libraries that you have created by going to your own folders. Library files can be located anywhere on your computer. Select the library you wish to use and click Open. You'll see all the objects in the Library file when you scroll. Double click on the object you wish to paste into the drawing. You can paste several objects in your drawing while the Library dialog is open—just continue to double-click each one and resize them when you return to the drawing. You can also use Library files created by Abracadata's **Design Your Own Home: Architecture** program (\*.awl files found at theliquidater.com) although some libraries and objects may not open. (See additional information about Libraries in the Options Menu / Library, below. See also the Library Buttons section, below.)

**Tip:** To efficiently use your library objects, we suggest that you place several library objects into your drawing each time you open a library file. You'll be able to move and resize each object after you've placed them all. This way you don't have to keep opening the library dialog for the next object. See the following section.

## Library Buttons



There are ten Library Buttons underneath the Line End Toolbar: Door, Window, Kitchen, Bathroom, Bedroom, Furniture, Stairs, Cars, Trees, and Other. These library icons represent sets of library objects you can choose from. These buttons work *differently* from the Library/Image Tool, where you drag a box the size you want the library object to be and then click the mouse, which brings up a list of library files to choose from, and when you choose a file and a set of objects appears, you double-click the object *that you want to be the exact size of the box you just dragged*.

With Library Buttons, you click one of the ten buttons and a set of objects appears, then you double-click the object that you want and immediately get it. To resize it you simply click the Mouse Pointer Tool and drag a handle. Make sure you have *Show Dimensions When Drawing* checked, in the Preferences dialog which is in the Options menu, if you care about the dimensions of the size you drag the object to. Objects can be dragged and dropped from Library windows which display after clicking on the Library Buttons.

The Ampersand (&) button can be used to open other libraries and/or user-created libraries. The default location of the Ez-Architect object libraries will always be C:\Program Files\Infinisys Ltd\Ez-Architect\Library\, so when the Ampersand (&) button opens your file handler, that's the correct path. Once that path is set, it brings up a list of library files to choose from, and when you choose a file and a set of objects appears, you double-click the desired object. To resize it you simply click the Mouse Pointer Tool and drag a handle.

## Importing graphic files

You can import the following file types: bitmap files (bmp, jpeg, gif, tiff, and png) or meta-image files (emf, wmf), while using the Library/Image Tool. That's why it's called an Image Tool—it imports images into your drawing which you can then resize and move. It even lets you import transparent .gif files in which all the white color is invisible, thereby allowing the background to show through. After dragging a box and getting the Open File dialog, use the down arrow on the "Files of type:" drop-down list and select All Files (\*.\*). Now select the file you wish to import and click Open. Bitmaps are rotatable.



### **Stamp Tool**

The Stamp Tool duplicates an object by clicking in the layout window with the mouse. To use this tool, choose the Stamp Tool. Click on object to be duplicated and copy it (Ctrl C). Click with the mouse in the main window to duplicate the object as many times as desired.



### **Eyedropper Tool**

The Eyedropper Tool lets you select this tool and then click on a colored object and then Shift Click while hovering over a different object and the first object's color will replace the second object's color. If the second object was drawn with no color property (by drawing it when the leftmost pattern palette button—the dash means transparent—is in effect), then in order to drop in the color you need to Shift Click not IN the object but on its border or your Shift Click will not work. You can also click on any pattern or color in the palettes while the Eyedropper Tool is selected and Shift Click it into objects.



### **Door Tool**

The Door Tool allows you to cut doors in existing walls. It works on walls, not lines, so just thinking a Rectangle Tool line is a wall will not help you. There are 4 wall tools and Rectangle Tool isn't one of these. You need not select anything. Just hover over a wall after clicking on the Door Tool and when you see a teeny part of the wall under the end of the saw vanish, click the mouse. You will see a red dot when you do it accurately. Now move sideways on the wall and do it again. The wall section between the 2 click points is gone. Add a door--or not.

### **Auto Dimension Lines**

This feature is not a tool, but a switch you can turn on and off. Set this up in the Preferences dialog. You can set the position of the lines, whether or not they should be grouped with the object, and whether or not the width of the auto-dimension lines should be the default one pixel width or conform to the current line width setting. It works with lines, hollow lines, walls, hollow walls, rectangles and rounded rectangles.

### **Using Colors and Palettes**

When you draw an object by dragging it to size and releasing the left button, it will take on the currently selected color or pattern. If you want to change an object's color, select the object with the Selector Tool and then click a color or pattern in the palettes. Or use the Eyedropper Tool to stick a color into the object without the need for selecting the object.

Note that left clicking a color or pattern will select a color or pattern to put IN objects, while right clicking a color will select a color to use for the object's border. No patterned borders allowed, but you can use patterns in text—although we suggest avoiding this as it leads to strange effects you won't like. See the Text Tool info and you'll see what we mean.

You can easily modify a pattern in an object by selecting the object and then pressing the Control Key along with left or right mouse button clicking on patterns and

colors in the palettes—although we suggest avoiding this as it will likely lead to patterns that recall your object pattern editing even though you’re trying to just get a selected pattern palette pattern. Exiting the program and then re-entering it cures this problem.

### **Adding Textures to Objects**

Not only patterns and colors can be added to objects but textures can be added as well. Here are the steps you need to follow to get a texture on an object:

- Find a texture file (they’re images)
- Select Object Properties on the Options menu
- Click the Texture Button
- On the Textures dialog click the Assign Textures button
- Navigate to the texture desired in your file folders and select it
- If desired click the Magnification or Reduction buttons or Rotation number to adjust the texture
- Click OK on the Textures dialog and OK on the Object Properties dialog
- You’ll see the texture in your object

NOTE: The texture needn’t be a texture. It can be a photograph of anything that you might wish to have as the interior of your selected object. E.g., if it’s a face, you’ll need to click the Magnification or Reduction buttons to adjust texture so it’s only one copy of the face since you’re likely to get a repeating pattern of lots of faces, or a mere part of the face, at the so-called texture’s original magnification.

### **LINE THICKNESS TOOLBAR**

Select the line thickness by clicking on the appropriate line in the upper part of the Line Toolbar. You may click Other to bring up a dialog which allows you to set the thickness of the line in pixels.



## LINE END TOOLBAR

The line end toolbar displays various types of line ends. If you double click any line end of the line end toolbar you'll cycle through different line end options. (See below.) Lines with a cross in the middle will display line dimensions.

Click on the desired line type then use the Line tool to draw the line. Lines with a cap only at one end should be drawn from left to right so the position of the cap displays as you see it in the toolbar. You can flip a line horizontally or vertically if the end cap isn't where you want it.

Double click any line end of the Line End toolbar to select available line ends—these nine choices will appear before the operation cycles back to the first choice:



## Library Buttons

Underneath the Line End Toolbar are the Library Buttons. These library icons represent sets of library objects you can choose from. See the Library Buttons section of the Library/Image Tool discussion a few pages back for details on usage.





## Menus



**Ctrl keys:** As you get familiar with Ez-Architect, you will find that if you learn to use the control keys your work will be faster and more efficient. Control keys are located next to the menu commands and appear as Ctrl+ a letter, like Ctrl+N in the menu illustrated below. Sometimes other keys are required such as Shift. Hold all the indicated keys down and the command will be executed. Even though Ctrl keys are shown in the menus in capital letters, do not use the shift key unless it is indicated in the menu command as "Shift."

## FILE MENU

### New - Ctrl+N

Use this menu option when you want to start a new drawing.

### Preview

The Preview function shows previews of Ez-Architect drawings, which are .aad. It previews only .aad drawings.

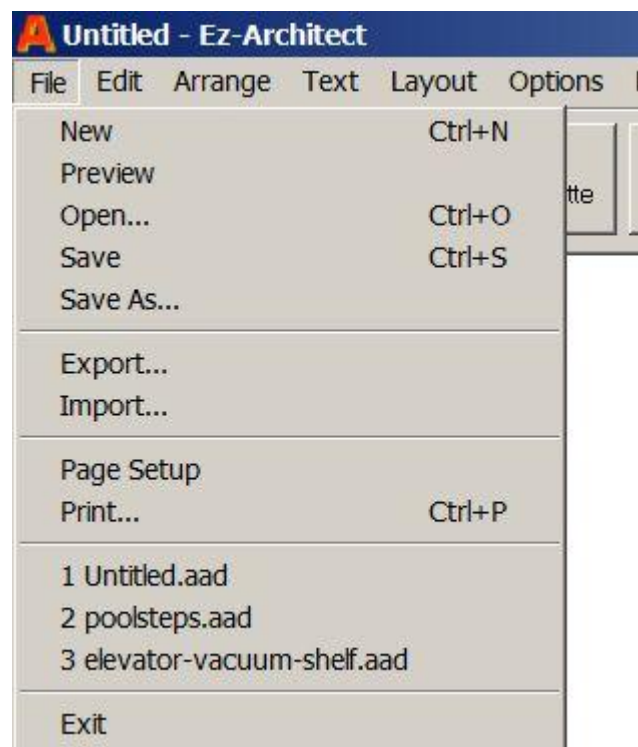
### Open - Ctrl+O

Open a previously saved drawing. This will open a standard Windows file dialog so you can locate an Ez-Architect file on your computer (extension .aad). If you wish to open a file from Abracadata's **Design Your Own Home Architecture** (extension .aig), see Import, below.

Twenty-one plans have been included with Ez-Architect: five elevations (side views of buildings) and sixteen floor plans. (To find these, look in Sample Plans, which is one of two subfolders in the Ez-Architect folder. The Ez-Architect folder is in the Infinisys Ltd folder, which is in the Program Files folder, which is one of the main folders on your hard drive, as most of you know.) There is also a grid to help you get perspective right when you're doing elevations. To use this, put it on layer one, disable that layer so it's grayed out, and then draw your elevation on layer 2.

You can experiment with our plans to get familiar with the program or use them as a starting point to begin a plan you're thinking about. Use Ctrl+O to open the plans. When you do, follow these guidelines:

1. Level 1 is where all the objects are all placed. You should be able to use all of the program's functions.
2. Do not draw or edit anything on the Base layer—but use the base layer to look at all



Layers together. You won't be able to bring to front or send to back while on the Base layer. So you'll want to get in the habit of drawing and editing on Layer 1.

3. To draw on separate layers in order to add plumbing, heating, insulation, electrical, landscaping, or furniture or any other part of your plan that you want to keep as a separate set of data and visuals, first go to the Layout dropdown and select Layer 1 only, then select Disable Selected on that dropdown. Then select layer 2 or higher as well and leave it selected and enabled (editable). Next, draw on this enabled layer. (See also Import, below.) There are 9 layers you can use, if desired.

### **Save - Ctrl+S**

Saves the current drawing.

### **Save As**

This opens a dialog so you can save the current drawing with a different name.

### **Export**

You can export anything you draw to graphic files with the following extensions .pdf, .bmp, .jpg, .jpeg, .png, .tiff, .wmf, .emf and 2D .dxf files.

If your DXF files have text, it will not be displayed, since text is treated in many different ways by different programs and causes major compatibility problems. And DXF lines will appear but line formats (dotted, dashed, thickness, dimension lines, etc.) are not included because they are treated in many different ways by different programs and these cause major compatibility problems as well.

Many of our users are companies that want to provide data to others. DXF is the standard format for draw data and CAD plans. Also, users can download a lot of furniture objects from the internet in dxf format and use them.

More DXF information: Arcs are exported as a series of very short lines. These will appear and print as arcs when imported.

Layers and layer names are exported fine. The base layer is exported as layer "0". In importing DXF files, the DXF file will be imported into the layer above the highest layer currently in use. Therefore if you are only using the Base layer, the imported DXF file will be imported into Layer 1.

Layers are imported as separate layers. The first layer will be imported into the layer above the highest layer currently in use. Therefore if you are only using the Base layer, the imported DXF file will be imported from Layer 1. If the DXF file is multi-layered the layers will be imported separately into successive Ez-Architect layers. If the imported file has more than 9 layers, layers 10 and higher will be merged with the ninth layer.

The scale of the original diagram is not included in the DXF data. The file will be imported at a size that displays comfortably in the Ez-Architect window. The DXF data will be displayed as one grouped object. However if the dxf file is multi-layered the layers will be displayed as separate objects in each different layer.

To adjust the size of the DXF diagram with the mouse while maintaining the vertical and horizontal ratio of the diagram, follow these instructions. 1. Draw a square (hold down the Shift key while drawing with the Rectangle tool) around the entire diagram. 2. Choose "Select All" from the "Edit" menu to select the square and the diagram. 3. Choose "Group" from the "Arrange" menu to group the square and the diagram into one object. 4. Select the "Mouse Pointer" tool. 5. Adjust the size of the square by moving the bottom right handle with the mouse while holding down the Shift key.

To restore the DXF diagram to the original scale you need to have a section of the diagram which you know the correct length of. Then you just need to draw a line of that length in Ez-Architect and adjust the size of the diagram until the section whose length you

know is the same length as that line.

Note that any PDF file exporting also simultaneously saves a 1.bmp file with a BMP of the image. You can use the Export function to save custom objects you design that you wish to add to your object libraries or to use in other programs. Exporting them is not necessary for including them in your libraries. (See additional information about your Libraries in the Options Menu : Library, below.)

## Import

Use Import to import graphic files (wmf, dxf, bmp, gif, jpg, tif, png) directly at their original size—except that dxf graphics sizes will be arbitrary, but you can select a dxf graphic's handle to drag it to resize it. Bitmaps are rotatable.

Also use this option to import files you created with the Abracadata ***Design Your Own Home Architecture*** program. (file extension .aig). Your files will not import perfectly, but we have devised some tricks to assist you in importing plans that you'll be able to work with in Ez-Architect.

1. First print your Design Your Own Home: Architecture plan from the Design Your Own Home: Architecture program so you have it for reference.
2. You need to Import into layer 1, NOT the base layer. To do this:
3. Click on the "1" button that's just below the word File on the navigation menu. This will enable you to import to Layer 1. Be sure that no other layer numbers are selected.
4. You *can* import into the Base layer, but we don't recommend it as several functions won't work properly: e.g., the bring to front/send to back functions. If you import to the Base layer and you realize after doing it that you're having problems with some of the program's functions, do this:
  1. Do Ctrl+A to select everything on the base layer.
  2. Then Ctrl+X to cut every object.
  3. Click on the "1" for layer one.
  4. Then Ctrl+V to paste all of your objects into level 1. They will all be selected. Leave them that way.
  5. Immediately drag these selected objects up and to the left about 20 pixels as the paste function will move everything down and to the right about 20 pixels from their original placement. Unselect all objects. Save.

## **Working With Imported Abracadata Plans**

You may see the following anomalies in your imported plan:

- missing or partial text
- missing walls
- missing objects

If you see that there are missing text, walls, objects, etc., use your printout to make your corrections. The import function ain't perfect. Sorry. Sometimes if you widen a text box you'll find the missing text. When you review your text objects, you may see that there are tiny squares instead of spaces; just edit the text and replace the squares with spaces. (See also Open Ctrl+O, above, for info on using layers.)

## **Page Setup**

Select Page Setup to choose the settings for your printer pages. Settings you make in this dialog will affect the size of the overall work area for your drawing.

## **Print - Ctrl+P**

Use the print option to output your work to paper. You will be able to print your plan with this function.

## **Recent File**

Click on the File menu, and you'll be able to view and open files you've recently opened or saved. Depending on what kind of computer maintenance you do, you may not always see your recent files, as some maintenance programs will remove the files *names* as a security measure. The files are still on your computer, but their MRU (most recently used) status will not be available. Use the Open menu item to locate your file.

## **Exit**

Exits the program. If you haven't saved your plan, the program will warn you and give you a chance to save before closing.

## EDIT MENU – Right Click

### Undo / Redo / Flush Undo - Ctrl+Z, Ctrl+Shift+Z

Undo undoes the previous action. The number of multiple “undo”s you can do is based on your system's memory. If memory gets low use the Flush Undo command to remove your undo history. All history will be wiped out, so use the Flush Undo command when you are certain that you don't want to revert to any past actions. After flushing, Undo will be available for new actions. Use Redo to undo an undo. After you undo something and decide you want to revert back, use Redo.

### Cut - Ctrl+X

Use Cut to remove an object or several selected objects that you wish to place (paste) elsewhere. After cutting the item(s) remain on the clipboard ready for pasting. Cut differs from Delete in that deleted items do not get placed on the clipboard.

### Copy - Ctrl+C

Select and use copy to prepare to duplicate an item or several selected items. **Note:** the Duplicate function will do the same thing as copy and paste in just one action—press Ctrl+D after selecting an object and you'll get the number of copies specified in the Duplicate dialog, which you get to by clicking the Duplicate icon.

### Paste- Ctrl+V

Paste takes whatever items you have on the clipboard and pastes them into your drawing. You might be pasting an object you just cut or copied in your drawing, or you can paste an item copied from another program. (See Clear Clipboard for more.)

### Clear Clipboard

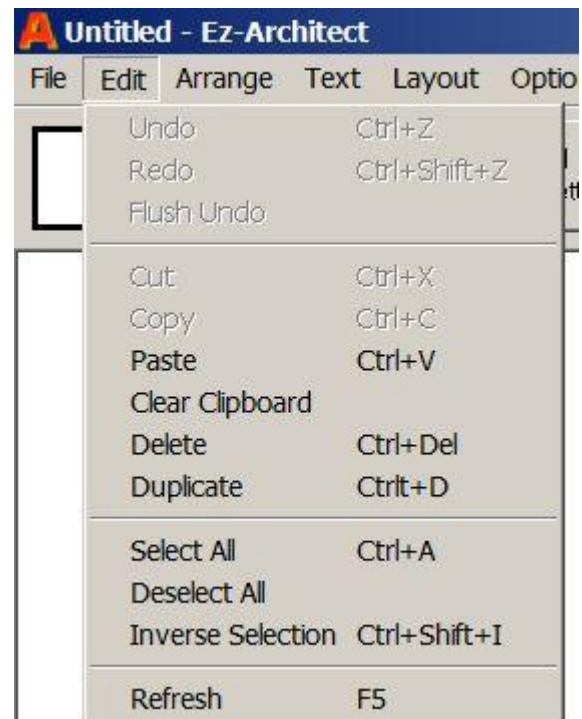
Ez-Architect has an internal clipboard for copying within the program, and an external clipboard for copying between programs. If you copy something within Ez-Architect, this object will remain on the internal clipboard and will prevent objects from being pasted from other programs. In this case select Clear Clipboard to clear the internal clipboard. Then you will be able to paste objects from other programs.

### Delete - Ctrl+Del or just Del

Delete an object by selecting it and clicking this option. Delete multiple objects by selecting all of them and using this option. You can also delete an object or multiple objects by selecting them and using the Delete key on your keyboard.

### Duplicate - Ctrl+D

With this tool you can draw rows of rectangles that simulate studs for walls, ceiling joists,



floor joists, paneling, decks, floor or roof or wall plywood, etc. Simply use the Rectangle Tool to create one board, correctly placed, of the correct width and length, and then click the Selector Tool. Now click on your board and then on the Duplicate Tool. You'll get a dialog that allows you to set horizontal and/or vertical offsets as well as the number of duplicates to create. This is the perfect stud tool, joist tool, rafter tool, decking placer, plywood placer, etc. Or use it to create a row of shelves against a wall, a row of trees in your yard—or whatever. The Duplicate Tool creates rows or column of boards or any other type of objects.

Once created, if you need your objects to be at an angle rather than parallel to the page sides, simply hold down the Ctrl key as you click on each object in the row, then select Group on the Arrange menu. Now click the Rotation Tool, then click on one of the grouped objects and drag the mouse to rotate the entire row of objects.

Once you have the horizontal and vertical offsets set as you want in the Duplicate Tool, simply pressing Ctrl+D will duplicate with no dialog needed. You might wish to set the number of duplicates to 1 and simply press Ctrl+D repeatedly to get correctly spaced boards/objects. That way you need not know the number in the row. Just press Ctrl+D until you have enough.

### **Select All / Deselect All – Ctrl+A for Select All**

Choose Select All to select all the objects in the current layer without having to select every object individually. Use Deselect All to deselect objects previously selected. You can individually select or deselect objects by holding down the Ctrl key and clicking any object that you wish to select or deselect. For example, perhaps you want to select everything on a layer except a particular Library item. Use Select All to select everything; then press the Ctrl key and click the Library item and it will deselect.

Select All is especially useful to move the plan's position on the page. It's especially useful if you got confused and drew on the base layer rather than layer 1 (recommended) and you can press Ctrl+A, Ctrl+X, and then click on the 1 under the word File on the Menu Bar and press Ctrl+V to put your objects where they belong.

### **Inverse Selection - Ctrl+Shift+I**

This option reverses the current selection of the objects. All unselected objects will be selected, and all selected objects will be unselected.

### **Refresh - F5**

This refreshes the screen. The refresh rate is so fast that you may not see any flicker.

## ARRANGE MENU

### **Bring To Front / Send To Back - Ctrl+F / Ctrl+B**

Objects can be brought to front or sent to the back of each other. All objects are either in front of or behind some other object. When you overlap them you will see how they are layered. Use this function when you want to change an object's position with respect to another object that's in front or behind it.

### **Rotate 90 degrees Counter Clockwise - Ctrl+L**

Rotate any selected object or selected group exactly 90 degrees counter clockwise.

### **Rotate 90 degrees Clockwise - Ctrl+R**

Rotate any selected object or selected group of objects exactly 90 degrees clockwise.

### **Rotate 1 degree Counter Clockwise - Ctrl+2**

Rotate an object or group of objects counter clockwise by one degree at a time.

### **Rotate 1 degree Clockwise - Ctrl+1**

Rotate an object or a group of objects clockwise by one degree at a time.

### **Flip Horizontal / Flip Vertical - Ctrl+H / Ctrl+V**

Select an object and then use this menu item to flip it. This will either give you a vertical or horizontal mirror image of the object. Flip horizontal flips the object around its X-axis. Flip vertical flips the image around its the Y-axis.

### **Left / Right / Top / Bottom Alignment**

To align two objects, click the mouse pointer selection tool, then to select two particular objects click on the first one and then Ctrl click the second one. They are both selected. The first stays put; the second moves to align itself with the left or right or top or bottom of the first one.

### **Group / Ungroup - Ctrl+G / Ctrl+U**

You may want to group objects so that you can move them as a group, flip, rotate or otherwise change their position in one movement. You may group objects into a new single

d - Ez-Architect	
Arrange	Text Layout Options Key Assist He
Bring To Front	Ctrl+F
Send To Back	Ctrl+B
Rotate 90 degrees Counter Clockwise	Ctrl+L
Rotate 90 degrees Clockwise	Ctrl+R
Rotate 1 degree Counter Clockwise	Ctrl+2
Rotate 1 degree Clockwise	Ctrl+1
Flip Horizontal	Ctrl+H
Flip Vertical	Ctrl+I
Left alignment	
Right alignment	
Top alignment	
Bottom alignment	
Group	Ctrl+G
Ungroup	Ctrl+U
Lock	Ctrl+K
Unlock	Ctrl+J

object. Select the objects you want to group and then use the Group option to convert them to a single object. Select a grouped object that you want to ungroup and select Ungroup to separate them into individual objects again. You can also group grouped objects and have several levels of groups. For example, you might group several objects to make a cabinet group. Then you might want to group all of the cabinets in a room into a kitchen group where the cabinet is a grouped object within the kitchen group.

When selecting objects to group, you can select multiple objects by clicking on any free area (without objects) and dragging the mouse to surround the objects you want to select with the selection rectangle. Objects partially inside the selection rectangle will also be selected. You can also select multiple objects by holding the Ctrl key down while you click on each object. Keep the Ctrl key pressed as you click.

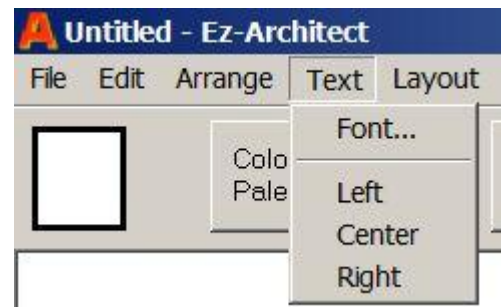
### **Lock / Unlock - Ctrl+K / Ctrl+J**

Use this function to keep an object from being changed or moved or otherwise altered. When an object is locked, you can't modify or move or do anything with it until you unlock it. This can be useful if you have several objects close to each other in one area that you want to move but you want one object to remain untouched. Lock it, and you don't need to worry about accidentally moving or adjusting it.

## **TEXT MENU**

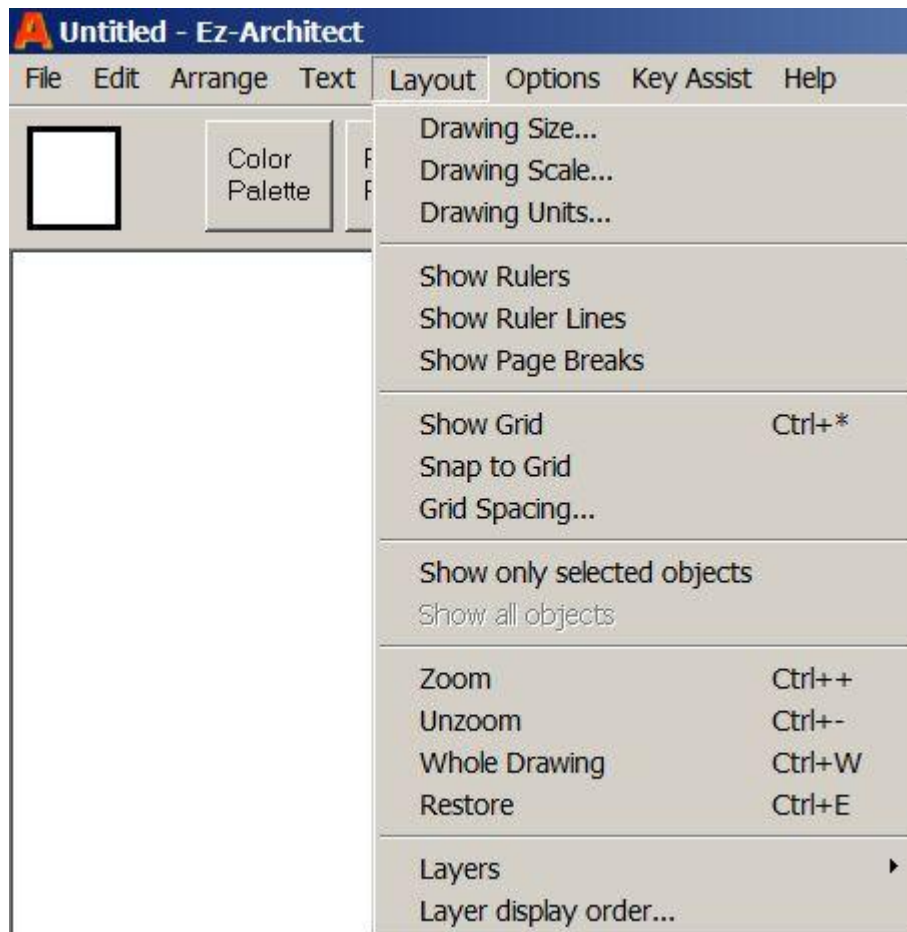
When you use the Text tool or the Vector text tool and other objects that include screen text, you may use the items in this menu to set the style and characteristics of your text. Font will take you to a standard Windows font dialog where you can set the font, style, size, etc. of your text. Use the Left, Right, or Center options to justify the text within a text box.

The font and styles you set here will also apply to other text in the program, including dimension lines and measurements that appear on screen. Change font characteristics as needed to assure your dimension lines and other measurements appear in the style you wish.





## LAYOUT MENU



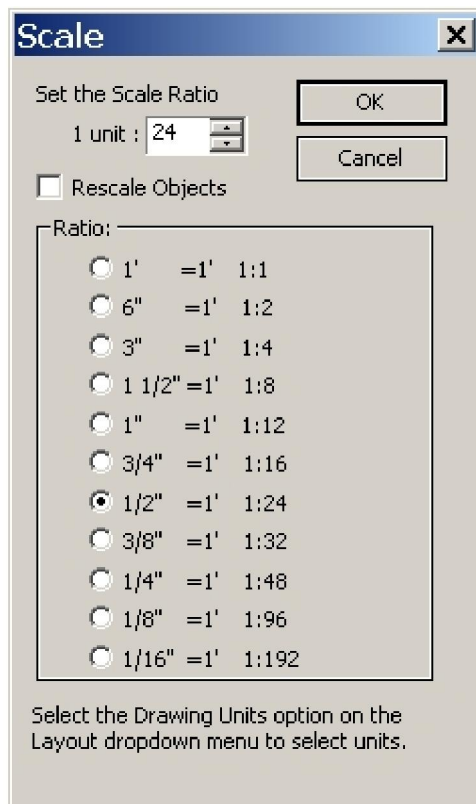
### Drawing Size

Use this menu option to set up the number of pages you wish to have in your final drawing. In the dialog box select the number of pages horizontally and vertically. The size of each page and whether your pages are Landscape or Portrait is determined by what you have set in the Page Setup dialog (see File Menu).

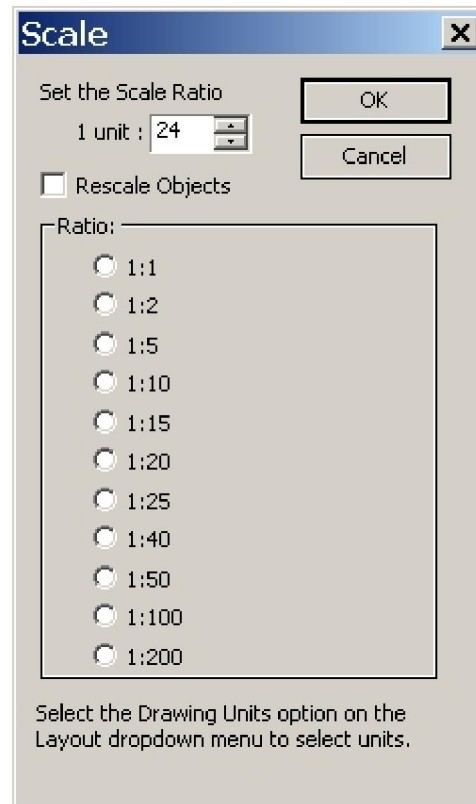
### Drawing Scale

One of the first things you'll want to do before you start drawing your plan is to set up your Drawing Scale. The scale determines all the measurements you see in your drawing and on the rulers (if you choose to view them). You can change your scale, with or without resizing all of the objects, if you decide that you need a different scale. When you wish to change the scale *and* resize the objects be sure to check the *resize objects* check box before you click okay. Otherwise your scale will change but your objects will stay the same size. You can select from any of the preset scale options or you can set a different ratio for the desired scale by using the arrows for ratios up to 1:200, which is Ez-Architect's optimal top range. If you want to have a larger ratio, like 1:500, you may type it in and your drawing information will show the correct information. However, the rulers may not provide useful

tick marks. And you may find other limitations when you go beyond the scale range that the software was designed for.



*English Scales*

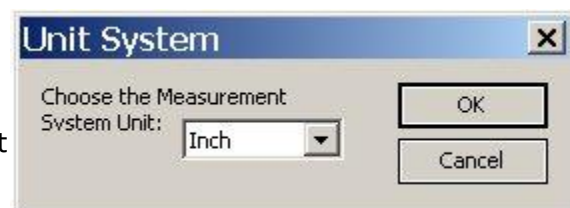


*Metric Scales*

To set your own scale, use a ratio of 1 to a specific number in the same units. If you want a scale of 1" = 1' for example (perhaps you're designing a small area), set that scale by entering 12, as the dialog is looking for simple ratios (in this case a ratio of 1:12). Just think of the screen distance as 1 in your ratio and the real world distance as the number you enter in the ratio box, but in the same units. In this example 1 inch on screen = 12" real world inches (or 1 foot).

## Drawing Units

Select this option and a dialog box pops up that asks you to choose the type of measurements that you prefer to use. Use the drop down menu to choose from the available options. All measurements and dimensions in your drawings will be displayed in the measurement units you select here. Supports feet and inches, meters, fractional inches, fractional feet and inches, and inches.



## Show Rulers

This switch turns the screen rulers on and off.

## Show Ruler Lines

This switch shows you a solid-line grid based on the numbered items on your ruler. You can use Show Ruler Lines even if your rulers aren't visible.

## Show Page Breaks

This switch shows you where your pages will break when you print your plan. Use this to make sure that important parts of your drawing don't end up two pages. If this happens, use Select All and move your entire plan so that pages break where it's most convenient for you.

## Show Grid - Ctrl+\*

Select this option to show a visible dotted grid in the drawing area. You can use this to line up and/or evenly space objects.

## Snap To Grid

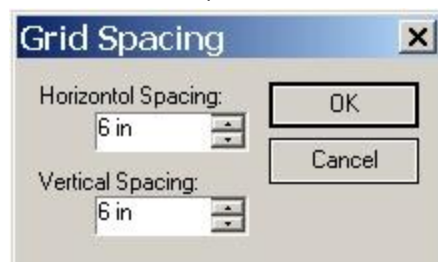
If you check this option, all objects snap to the points on the grid. If you wish to draw objects between the grid points then unselected this option. When your scale is set to 1:24 where  $\frac{1}{2}" = 1'$ , the program will automatically snap to  $\frac{1}{4}"$  increments, even though you cannot set the grid to under 5". This auto-snap is so you can easily create detail drawings with accurate English lumber dimensions, which require board widths like 3.5" or 7.25" and board thicknesses of 1.5" or 3.5".

In other words, if your scale is big enough ( $1' = 1'$  to  $\frac{1}{2}" = 1'$ ) to do detail drawings where you need snapping to convenient decimal fractions of an inch, it will automatically happen without you having to be concerned about either grids or snapping to grid.

Smaller scales ( $\frac{3}{8}" = 1'$  to  $\frac{1}{16}" = 1'$ ) will snap to the nearest inch.

## Grid Spacing

This opens up a simple dialog that lets you set up horizontal and vertical spacing for your grid. The grid spacing allowed is 5" or more. Smaller grids are not needed because if your scale is big enough ( $1' = 1'$  to  $\frac{1}{2}" = 1'$ ) to do detail drawings where you need snapping to convenient decimal fractions of an inch, it will automatically happen without you having to



be concerned about either grids or snapping to grid.

## Show only selected objects / Show all objects

Choosing this hides all objects which are not selected. This is useful for printing or exporting only specified parts of the drawing. Choose "Show all objects" in the Layout menu to display the entire drawing again. Using layers is another way to show parts of drawings only.

## Zoom - Ctrl+=

Use this to zoom in on an area of your drawing to view the details close up or to draw small items that might be difficult to draw at the neutral zoom position.

## Unzoom - Ctrl+-

This zooms out, either reversing your zoom-in or you can zoom out farther than your drawing size and see more of your drawing on screen (see Whole Drawing, below).

## Whole Drawing - Ctrl+W

This displays the whole drawing. This is particularly useful if you have a large number of pages and wish to get an overview of your plan.

## Restore - Ctrl+E

Use this to restore the drawing display back to the size it was before selecting Whole Drawing.

## Layers



Ez-Architect has 9 available layers in addition to the base layer. The default layer is the base layer and its name cannot be changed. The buttons for the layers are displayed on the right side of the menu bar. Click the layer buttons to select the active layer. You can have multiple layers active at the same time. When you first create a layer, a dialog box comes up that allows you to change the layer's name (e.g., Electrical). When you select B for Base all objects in all layers are displayed and can be edited.

To use layers, remember to **ALWAYS DRAW YOUR FIRST LAYER ON LAYER 1**. In other words, when you begin a plan, click on the 1 under the word File on the menu bar and begin drawing. For another layer, click on 2, and so on. Do not use the Base layer (B) as your drawing layer. If you forget and draw on the Base layer and you realize after doing it that you're having problems with some of the program's functions, do this:

1. Do Ctrl+A to select everything on the base layer.
2. Then Ctrl+X to cut every object.
3. Click on the "1" for layer one.
4. Then Ctrl+V to paste all of your objects into level 1. They will all be selected. Leave them that way.
5. Immediately drag all these selected objects up and to the left about 20 pixels as the paste function will move everything down and to the right about 20 pixels from where they were on your original plan. Unselect all objects. Save.

You can do the following with the Layer function:

- ✓ Attach names to layers.
- ✓ Select which layers to display.
- ✓ Set layers to display in full, or be hidden, or be gray when not "enabled."
- ✓ Use Layer functions from the Layer Tool Bar, which is underneath the regular menu bar, or from the Layout menu.

- ✓ Identify active layers by those with a check mark displayed next to them in the Layer menu.
- ✓ Use a disabled (grey) lower-numbered layer (e.g., 1) for your already-drawn FIRST FLOOR of your floor plan, and then click on higher numbered layers on the Layer Tool Bar and draw upper stories, perhaps in another color.
- ✓ Use a disabled (grey) lower-numbered layer (e.g., 1) for your already-drawn floor plan, and then click on higher numbered layers on the Layer Tool Bar and draw electrical, plumbing, phone lines, ductwork, insulation, etc., in different colors.
- ✓ Use a disabled (grey) lower-numbered layer to put guide grids such as our 3D-elevation-grid which you'll find in the plans file. This grid will help with perspective on elevations (side views of buildings). To use this, put it on layer one, disable that layer so it's grayed out, and then draw your elevation on layer 2.

## **Layer Submenus**

### **Disable All / Enable All**

Disable All disables or grays out all the layers. Enable All activates all the layers. Objects in disabled layers cannot be selected or edited.

### **Disable Selected / Enable Selected**

You can deactivate and activate selected layers. When you deactivate a layer, you can use it for reference while drawing on different layers. For example, if you have a completed floor plan on one layer (e.g., 1), you can deactivate that floor plan layer and then create a new layer (e.g., 2) with your electrical plans. Another layer might be a plumbing diagram. Use layers to keep functions separate, but related and coordinated. Using different colors for each layer will give you the clearest idea of how the various aspects of your plan relate to each other when all layers are viewed together.

### **Delete Selected**

You may delete an entire layer's contents with this option. You are free to draw on this now-empty layer, copy other layers into it, or ignore it, since all layers are always "there" whether or not they're emptied by deleting them.

### **Layer Display Order**

The purpose of the Layer Display Order dialog is to allow you to drag the listed layers to a different order in the list in order to get them to display in different order in your plan.

Clicking this brings up a dialog which contains a list of the current layers in order, with the highest numbered layer at the bottom. (This list does not include the base layer, which always displays behind all other layers). If the user has changed the name of a layer the name assigned by the user will display.) Dragging a layer up or down with the mouse will change its order in the list. Layers display according to their order in this list. Layers on the bottom will display on top of layers on the top. This does not change the order of the layer buttons at the top of the window just above the palettes.

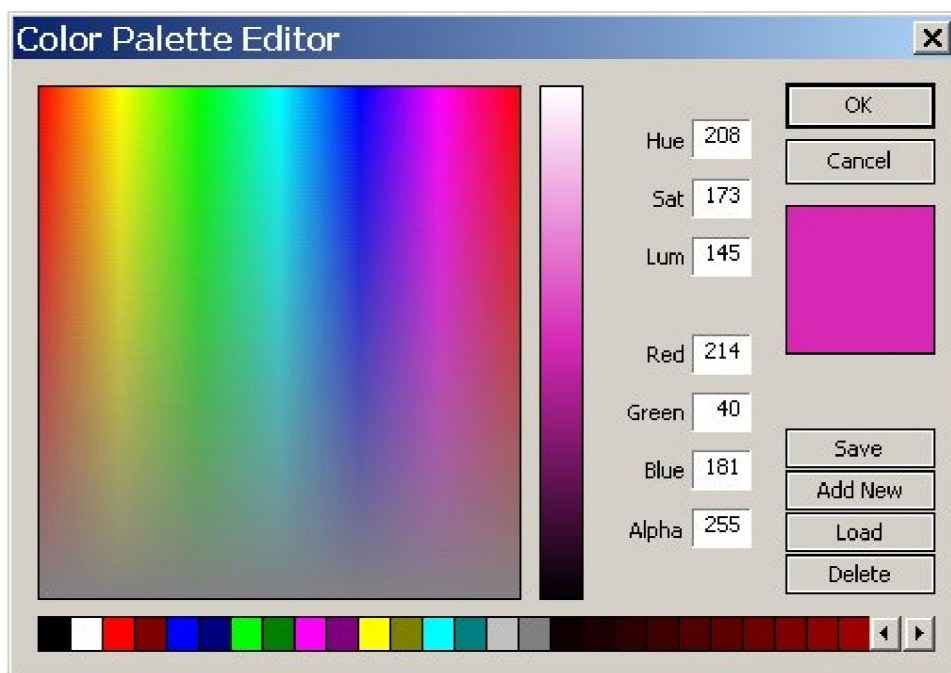
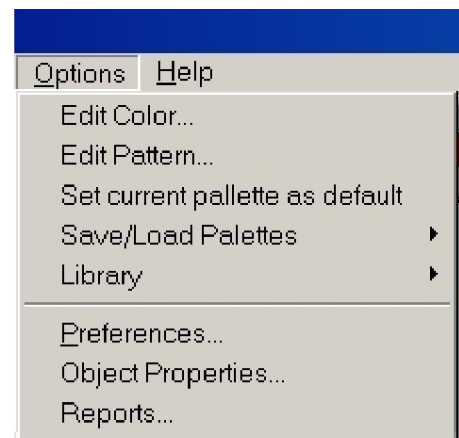
## OPTIONS MENU

### Edit Color

Choose this option to display the Color Palette Editor. Here you can modify your on screen color Palette. The current on screen color palette is represented at the bottom of the Edit Color dialog as a row of colors.

### Add New Color

Adds the current color (the color displayed in the colored square at the right [magenta in the above dialog]) to the left side of the current color palette.



### Load Color

Click on a color in the color bar at the bottom of the dialog to load it as the current color.

### Save Color

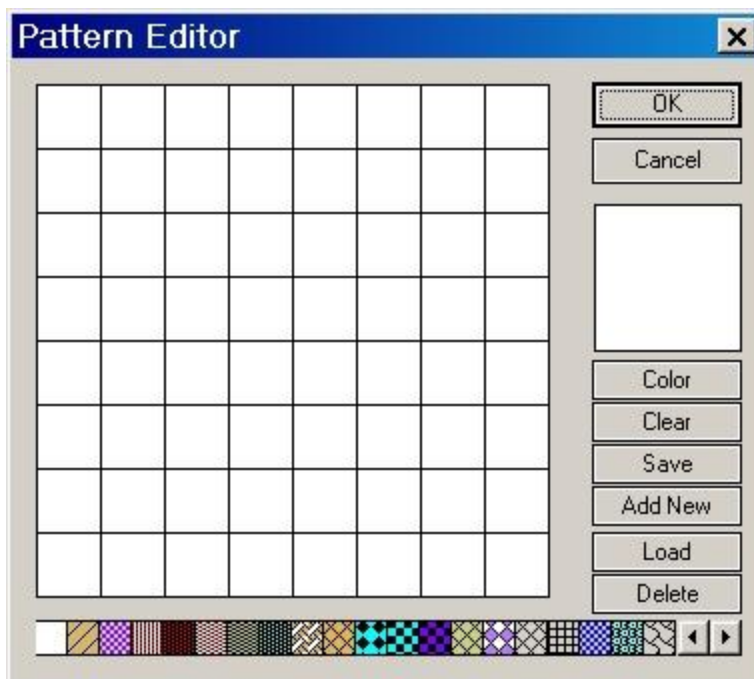
To replace an existing color, select the color to be replaced from the color palette (as in Load, above) and then choose the new color from the color picker, and click Save. If no color is selected then it adds a new color to the color palette (as in Add New, above).

### Delete Color

To delete a color from the current color palette, select the color and click the Delete button.

## Edit Pattern

Choose this option to display a dialog box which allows you to edit or create new patterns. Double click on any pattern to display its magnified form. Then edit the pattern by clicking on the squares. Click Color to select the color of your edits. Click on a white square to change it to the current color and vice versa. Click Save to save the modified pattern. Create a new pattern by clicking Clear, complete it and click the Add New button. You can continue adding new patterns. You can also, delete current patterns in this dialog. Select the pattern from the pattern bar at the bottom of the dialog and click delete. Be sure to click Save after you've added, or modified a pattern. That relates to your current session. Select Save/Load Palettes and then Save Pattern Palette if you want the changes to be there the next time you open Ez-Architect.



## Save Pattern

This overwrites the selected pattern. If no pattern is selected, the new pattern is added to the beginning of the pattern palette.

## Clear Pattern

Clears the pattern editor to all white.

## Delete Pattern

Deletes the selected pattern from the pattern palette.

## Add New Pattern

Adds a newly designed pattern to the left side of the current pattern palette.

## Load Pattern

Click once on a pattern in the pattern palette and then click Load to Load the pattern and

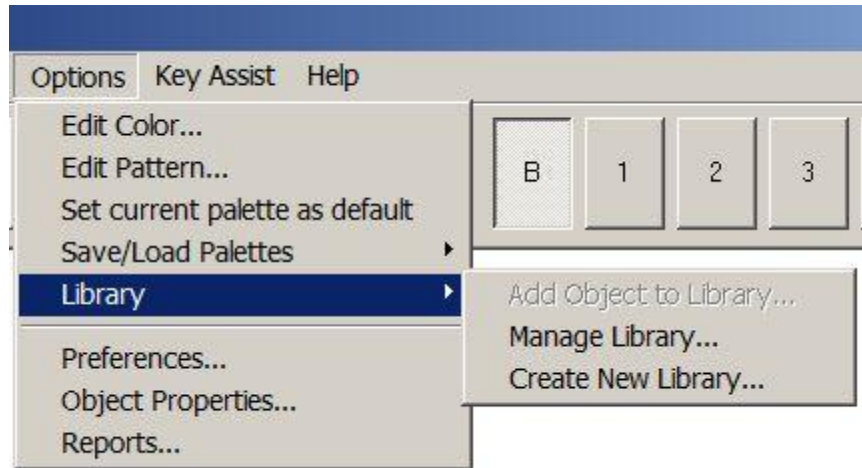
see its magnified form. You can also load the pattern by double clicking the pattern. You may then edit or delete it.

### Save / Load Palettes

Allows you to save color or pattern palettes Create, save and then use custom palettes for specific types of projects.

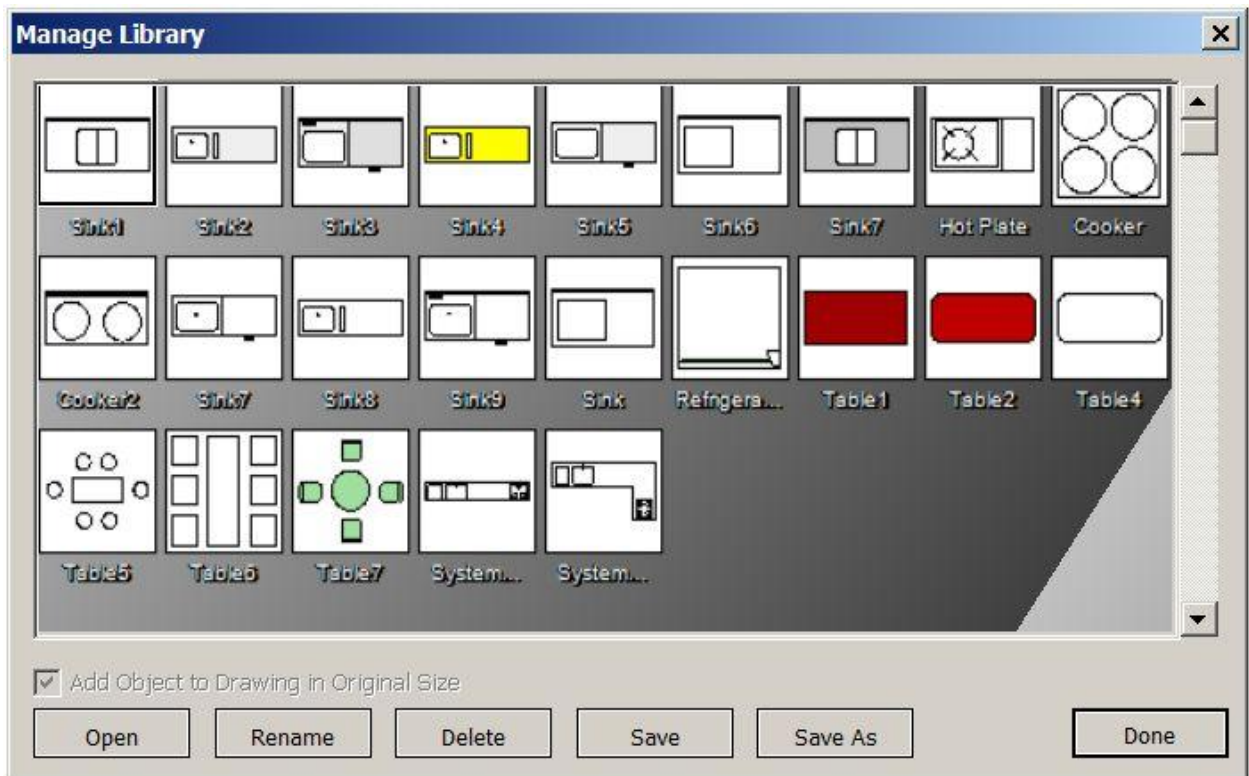
### Library

This menu item is for managing your library objects. To **use** your library objects use the drawing tools: first select a screen area for placing your object with the selector tool, then select the Library Tool and select the library object you want in your drawing. (See additional information in the Tools toolbar Library description, above.)



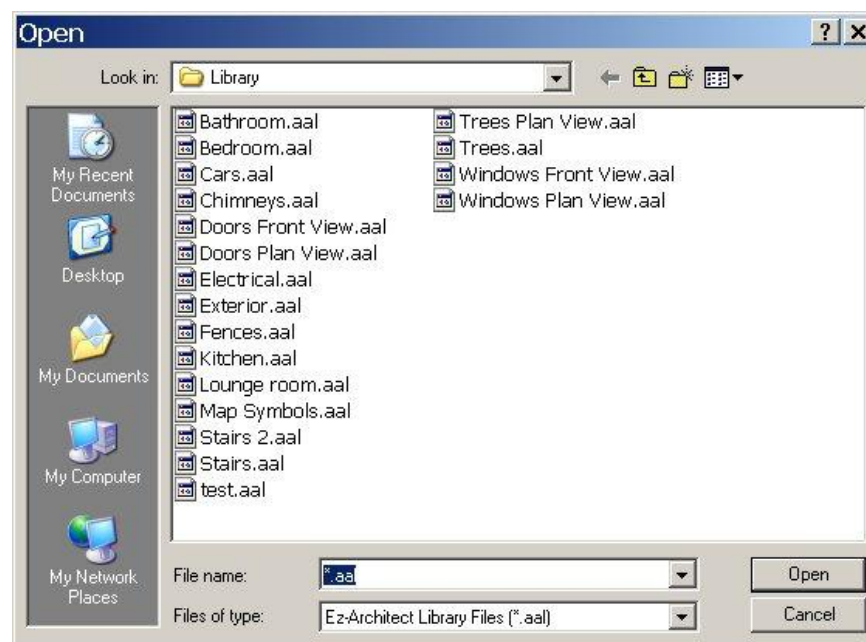
To manage your libraries you'll use the three Library submenus. These submenu items are for adding to the libraries, creating new library files, renaming library objects, deleting library objects, and other management functions. To place your Library objects in your drawing, you'll use the Library Tool in the Tools toolbar. Here you manage your libraries.





### Add Object to Library

To add an object to an existing library select the object on your drawing screen and then select this menu item. A file dialog will display. Select the library file (.aaf) you wish to add the object to and then click Open. The object will be added to the library.



## Manage Library

Select this option to open a library window. Click Open and select the library file (.aai) you wish to edit from the Open File dialog (see above), then click the Open button. The library objects will be displayed. When you have the library file open you may do the following:

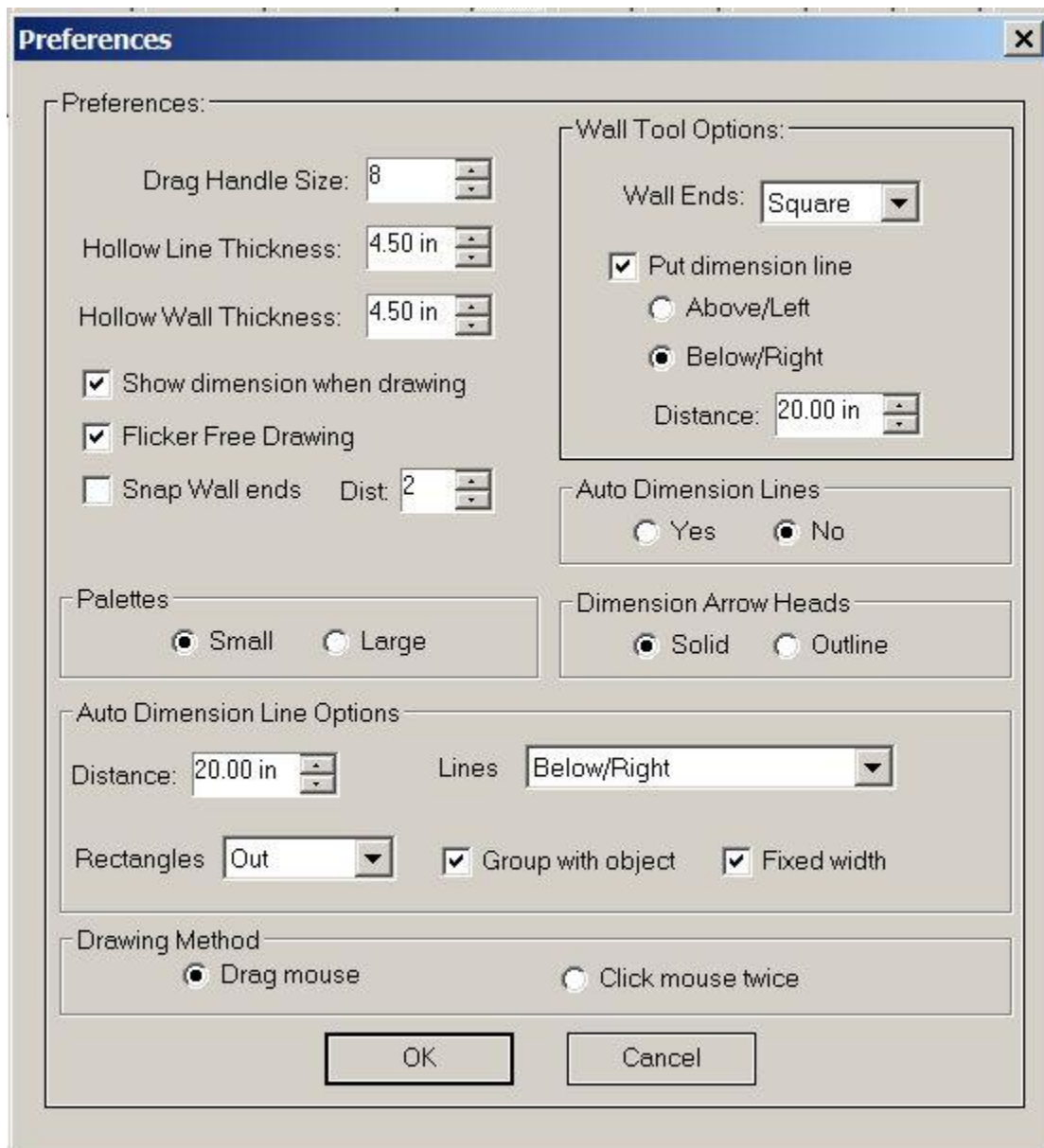
- ✓ Open: Opens the file dialog where you can select another library to open.
- ✓ Rename: Click on an object then click this button to rename an object.
- ✓ Delete: Click on an object then click this button to delete it.
- ✓ Save: Click to save the current library if you've made changes.
- ✓ Save As: Click to save the current library with a different name.
- ✓ Done: Click to close the Manage Library window.

## Create New Library

Select this item to create a new library. A file dialog will display. Enter the name of the library and select where you want to save it. Then click Save. Your library file will be empty until you add library objects to it. Create new objects or import existing objects into the drawing window, select the object and then use the *Add Object to Library* function (see above) to populate your library.

## Preferences

In this dialog you can set the general program preferences for Ez-Architect.



### Auto Dimension Lines

This feature is a switch you can turn on and off. Set this up in the Preferences dialog. You can set the position of the lines, whether or not they should be grouped with the object, and whether or not the width of the auto-dimension lines should be the default one pixel width or conform to the current line width setting. It works with lines, hollow lines, walls, hollow walls, rectangles and rounded rectangles. It also works with either type of continuous wall.

### Drag Handle Size

This sets the size of the handles on objects that are selected in your drawings. Experiment with different sizes to see what works best for you. These are set in pixels.

### **Hollow Line Thickness**

This sets the default thickness of hollow lines. This measurement will apply only to lines you draw after setting the thickness. Changing the thickness won't change any hollow lines you've already drawn.

### **Hollow Wall Thickness**

This sets the default thickness of hollow walls. This measurement will apply only to walls you draw after setting the thickness. Changing the thickness won't change any hollow walls you've already drawn. A good choice is 4.5 inches.

### **Show dimension when drawing**

If you click this check box you'll see the dimensions of objects as you draw them in the measurement system and scale you've set in the Layout menu.

### **Flicker Free Drawing**

If you leave this unchecked your drawing may flicker during scrolling if you have a slower computer.

### **Snap Wall Ends**

Check this box if you want wall objects to automatically join together if their ends are within the distance you set using the input box labeled Dist. Set the distance as closeness in pixels where you want snap to activate.

### **Wall Tool Options**

#### **Wall Ends**

This sets the shape of the ends of the lines you draw with the Wall Tool or the Hollow Wall Tool. Select the shape from the drop down menu. You may use Round, Triangle, or Square ends for corners if you like, but these will add length and may confuse you since the extra length is for dealing with corners. However, if you use Flat wall ends, all lengths are what you'd expect.

#### **Dimension Line Position Controls**

Select the position where you want your automatic dimension lines to display and how far distant they should be from the wall they're measuring. Set the distance in scale measurements.

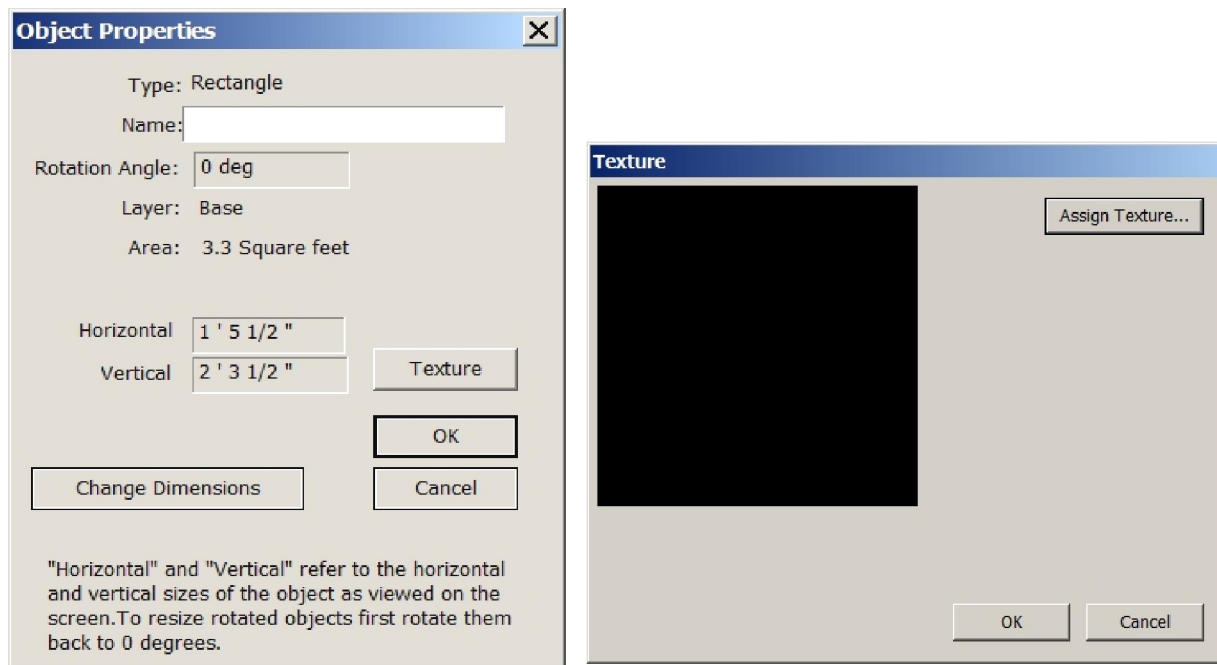
#### **Drawing Method**

The choices are: Drag mouse (normal) or Click mouse twice (in case your finger gets sore holding down a button while dragging).

#### **Dimension Arrow Heads**

When "Solid" is selected all dimension line arrow heads will display in solid color. If "Outline" is selected they will display in outline. This option applies to all dimension lines. It is not possible to mix dimension arrow types in a drawing.

## Object Properties



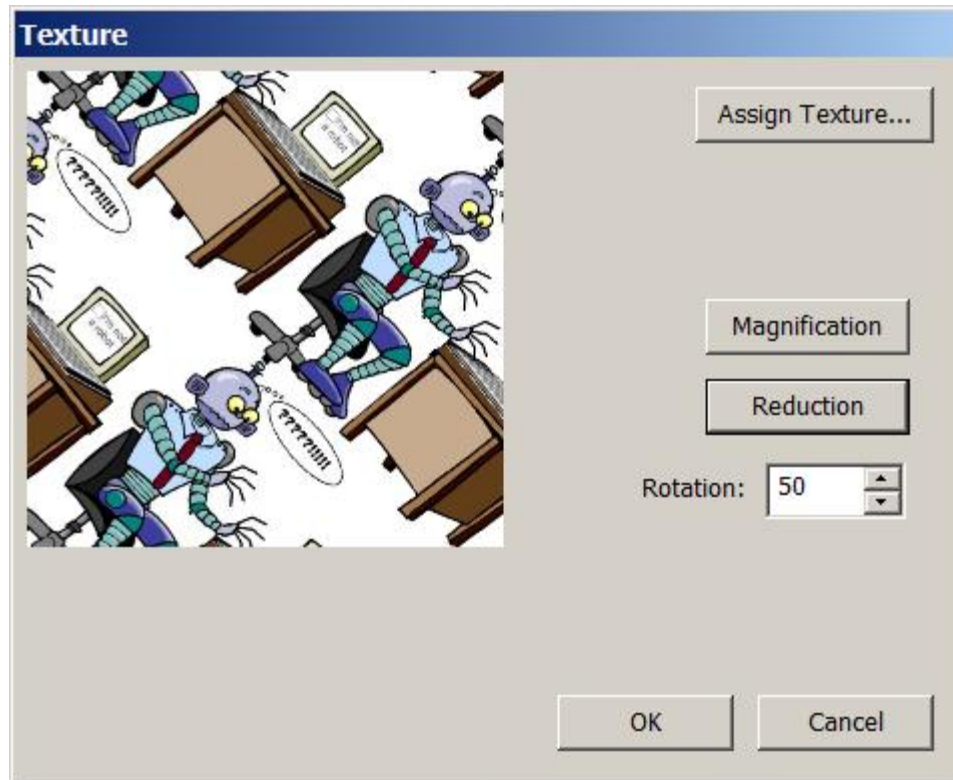
Select this menu item to display the properties of a selected object. You will see all of the information that relates to that particular object. You can enter a name for the object or group, change or view its rotation angle or dimensions, and see its layer. To modify the object, click the Change Dimensions button and enter new data.

This dialog box also appears if you select an object and right click.

Click the Change Dimensions button and input the desired name in the Name input box. You can also change the angle or dimensions of the object by inputting the desired angle in the Rotation Angle box or the desired height and width in the Vertical and Horizontal input boxes. **If you want to change dimensions, change the angle to 0 first** and hit OK, then right click the still-selected object and click the Change Dimensions button and input changes. This enables you to create precisely oriented objects. *There's an option to maintain height and width ratio when changing sizes in the Object Info dialog.* The Object Properties dialog also lets you change the size of objects by percent once you click the Change Dimensions button.

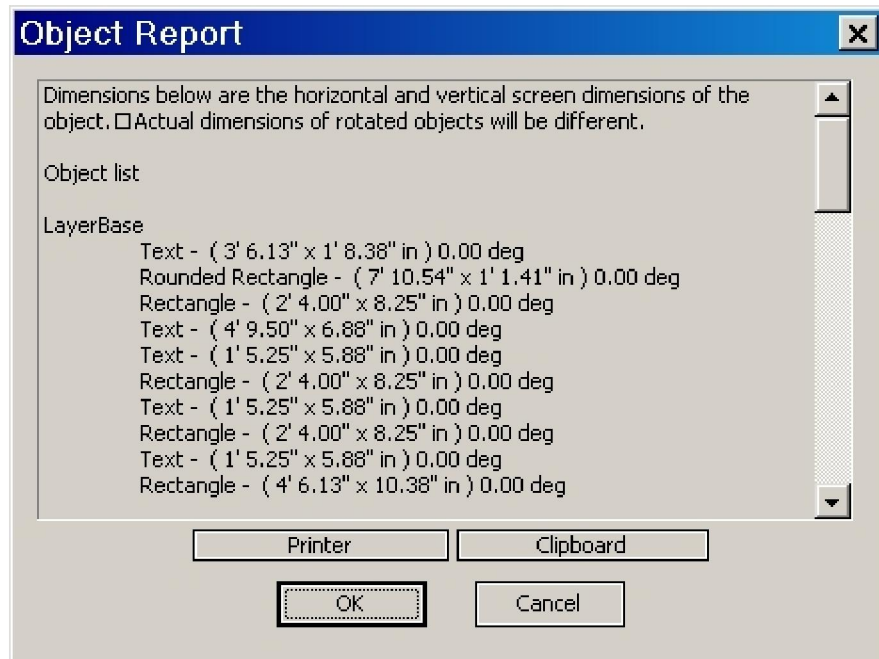
Adding textures to objects became possible with this version of Ez-Architect. There is a Texture button you can press in the Object Properties dialog that leads you to a Textures dialog (shown above). See the **Adding Textures to Objects** section above for details.

You may rotate, magnify, or reduce any bitmap that you select as your texture. The example below was reduced and then rotated.



## Reports

To get a report displaying the objects you've used, their types, their sizes, and their rotation angles, select this menu item. You'll be allowed to save to the clipboard or print a printout.



## KEY ASSIST MENU

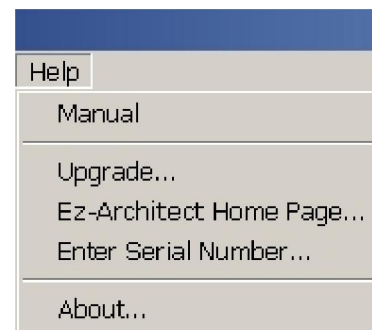
The Key Assist menu choices are Shift and Ctrl and Delete. They can be used in place of the Shift and Ctrl and Delete Key Buttons, which are at the top right of the screen (but are only visible when Large Palettes are set in the Preferences dialog). Either Key Assist menu choices or Key Buttons can be used in place of these keyboard keys. The Shift and Ctrl keys on the keyboard are used for some operations in Ez-Architect. Tapping the Shift or Ctrl Key Buttons is the same as holding down the Shift or Ctrl keys. Tapping them again releases them. Tapping the Delete key button deletes any objects that are selected. The Key Buttons do not function when clicked with a mouse.

## HELP MENU

The Help menu will give you access to information that will assist you in using Ez-Architect. Here you can also link to our shopping cart to purchase your license, and after you receive it, you'll enter your serial number. (See below.)

### Manual

From the Help menu, you can access this manual. The manual is a PDF file and requires Adobe Acrobat reader, which you can



download for free from Adobe's site here:

<http://www.adobe.com/products/acrobat/readstep2.html>. You may print the manual or use it electronically. Use Adobe's search function (Ctrl+F) or open the Bookmarks to find what you need.

## Upgrade

This will link you to our purchase page which is <http://theliquidateher.com/ez-architect-key.html>. Here you can buy a registration key so you have access to all the functions of the program including, save, print, export, etc.

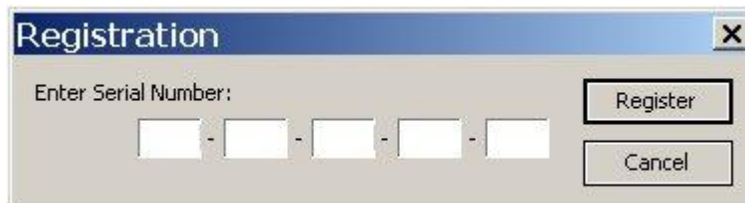
Click Upgrade and click the link. After you make your purchase, you'll receive your serial number by email, so be sure to use a valid email address when you order. You may also wish to whitelist info [at] aglasshalffull.org in your email program, as that's the email address that your registration code will be emailed from. **Note:** [Substitute "@" for " [at] " when you whitelist the above email address.]

## Ez-Architect Home Page

Click <http://theliquidateher.com/ez-architect.html> to access our website and the Ez-Architect page for news, updates, and other information.

## Enter Serial / Registration Number

After you receive your serial number you'll enter it by selecting this option. Then you will be able to print, save and utilize all the program's functions. We offer low prices for extra copies, since each serial number/key is for one copy of the program only.

A screenshot of a Windows-style dialog box titled "Registration". The dialog box has a blue title bar with a close button (X) in the top right corner. The main area is light gray. It contains the text "Enter Serial Number:" followed by five empty text boxes separated by hyphens. To the right of the input fields are two buttons: "Register" and "Cancel".