



**The following pages provides an overview of
PowerCADD 7.**

**We feel that version 7 is one of the most significant upgrade
releases of PowerCADD that has been seen for a decade.**

As usual, your comments are always welcome.

**Σvoy & Associates
Winnipeg, Canada**

9 January 2006

PowerCADD™ - What Is New for v7



Minimum System requirements are:

- a PowerPC G3, G4 or G5 computer
- at least 256MB (megabytes) of physical RAM is required for Mac OS X. We recommend a minimum of 1 GB (gigabyte) of RAM for optimal performance of PowerCADD running with all External plug-ins and Mac OS X.
- a hard disk drive
- 150 MB of free hard disk space for the PowerCADD application, PowerCADD documentation, optional external plug-ins, WildTools, Topography Tools, Architectural Extensions and documentation for the optional externals.
- a CD-ROM drive
- a printer or plotter
- Macintosh OS X 10.3 Panther or newer
- for colour output, Print Center which shipped with Mac OS X and a colour Postscript or Ink-Jet Printer

PowerCADD v6 Commands

If you are upgrading from PowerCADD 6 to PowerCADD 7, your PowerCADD 6 Key Commands will automatically be upgraded. The original PowerCADD 6 Key Commands file is NOT modified.

The Physical Manual

A new manual better provides detailed explanations including an accurate table of default key commands and firewall ports that must be open for the software updater to work. The manual is rife with Tips, Hints, graphics, and explanations of Advanced features that many may have missed in previous versions.




The manual displays this icon beside every NEW feature to ensure that you do not miss any of the numerous NEW features in v7.

Speed and Performance

The overall performance speed and crisp response has been greatly improved. Imagine hatches that render and redraw as quickly as fill patterns.

Drawing Window - Title Bar

The File Path Navigator provides a quick method to determine the path of a saved drawing or a Symbols Library and go to any folder or volume in that path.

Command  - click on the document's name in the document title bar to see the disk "filing" path of the current drawing or Symbols Library.

Save Dialogue

Improved Save dialogue adopting the OS X interface.

Snapping

The **Vertex** snap has been expanded in PowerCADD 7 to include the mid points of rectangles, round rectangles, arcs and similar objects.

Opacity and Auto-Fade - Tool Palettes and Floating Windows

Floating windows in PowerCADD 7 can be transparent. Auto-Fade on or off is controlled by the Window Fading settings in PowerCADD 7's Preferences.

The Size, Opacity, Auto Fade and Magnetic Edges of tool palettes can be customized.

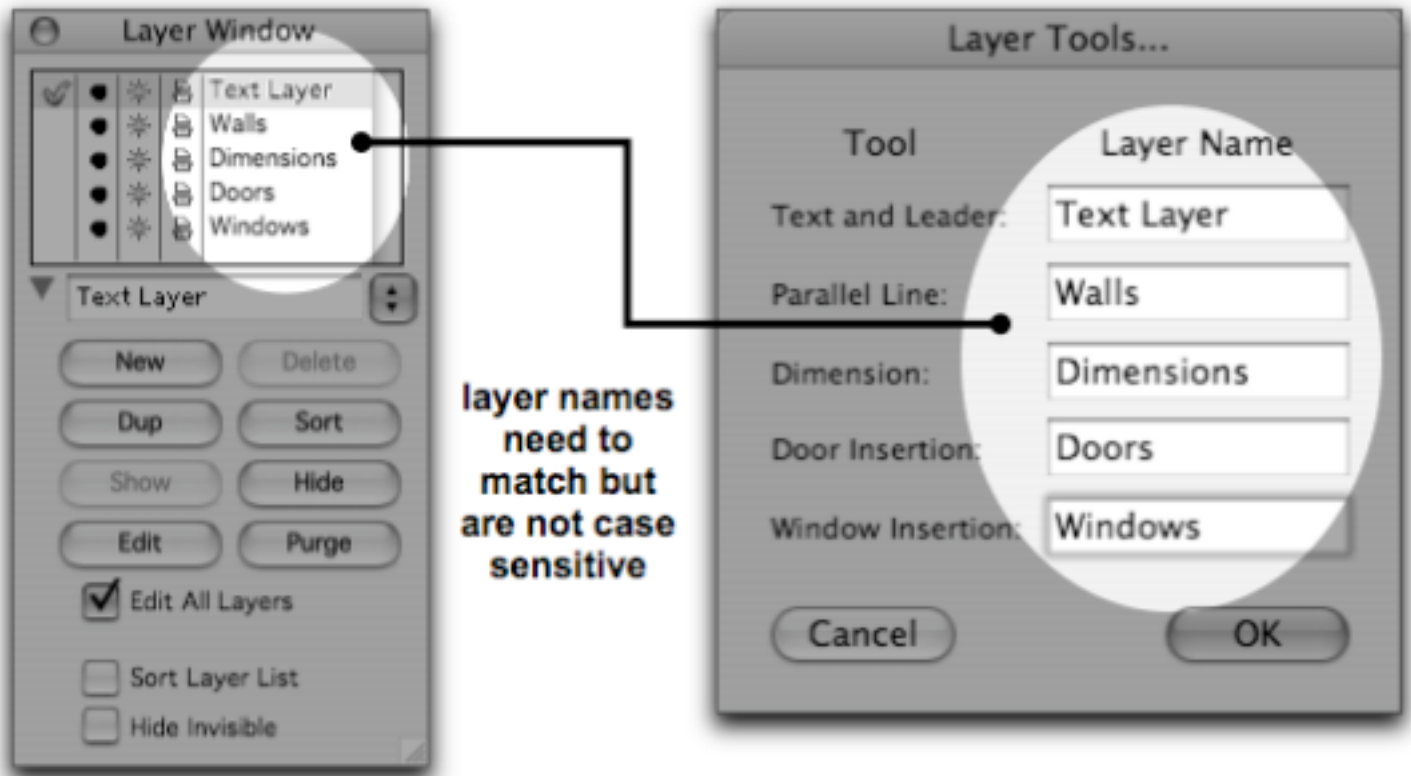
Control clicking a floating window provides the ability to adjust these settings for each floating window independently and provide a great deal of flexibility in customizing your visual workspace.

The normal state for a tool palette is determined by its Window Opacity setting.

A Tool Palette or Floating Window that has faded on screen will automatically return to its normal visibility state when you move the mouse over the palette or window.

New Layer Tools

Set up Layers specific to these six tools and when the tool is selected the layer will automatically switch and activate the appropriate Tool Layer.



Dimension Tool

Picking the Dimension tool can **automatically switch** to the Dimension layer.

Dimension text now supports font styles such as **bold**, *italic*, and underline.

A new option **Draw Horizontal Bar Fractions** in Dimension Edit allows you to specify how fractional dimensions are displayed.

Default Attributes

Control click any tool to set its Default Attributes.

The default attributes for tools also include Transparency for Pen and Fill settings.

PowerCADD 7 includes a Preference setting allowing you to assign **Global** Tool attributes.

Cursor Feedback

Improved Cursor feedback interface fully consistently with OS X.

Text Tools

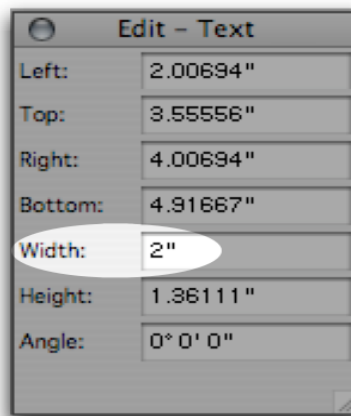
Improved Text handling including readability of mirrored text.

Improved Text insert cursor accuracy and provision of a visual base line.

Picking the Text tool can automatically switch to the Text Layer if the Layer Tools feature is invoked in the Layout Menu.

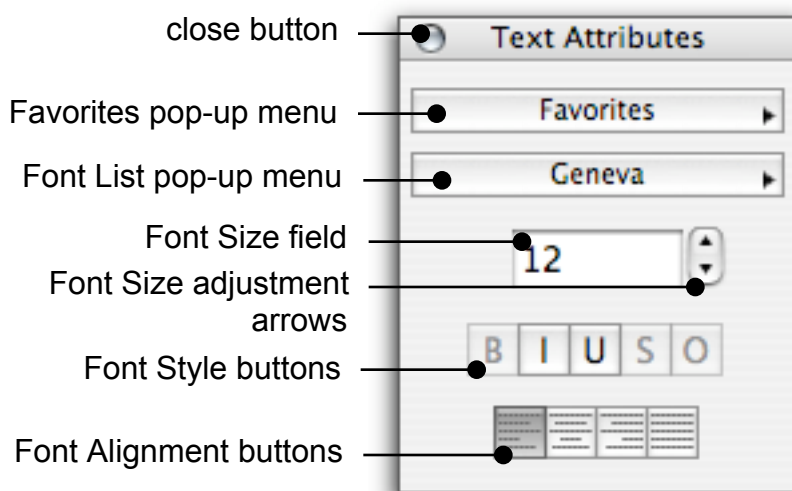
The new Text selection interface enables setting of custom text **styles** and their use. As not all font families in Mac OS X include a **bold**, *italic* or other special font styles, font family validity checking has been implemented.

The Edit Window may also be used to specify an exact width of a selected text block. When the text block size is changed, the text is automatically reflowed.



In PowerCADD 7 when a Text block is double clicked with any drawing or selection tool, the tool will auto-switch to the Text tool to enable editing of the text block.

New **Text Attributes** floating window for setting font and text styles in one place.



To make text editing easier, zooming in or out is now available within the Edit Text window.

Leader Tool

Picking the Leader tool can **auto-switch layers** and activate the Text Layer.

The Leader tool now has a **smooth** leader line option.

The width of a text block associated with a Leader line object may be dynamically resized and the text will **automatically reflow** vertically.

The **offset distance** between the end of a Leader line and the insertion point of the text block can be customized.

Text on Path

The object being targeted to receive the **Text on Path** operation can be either a distinct object in the drawing or part of a Group of objects.

Table Tool

The default font attribute setting for the **Table Tool** can now be different from the Text Tool and Leader Line tools.

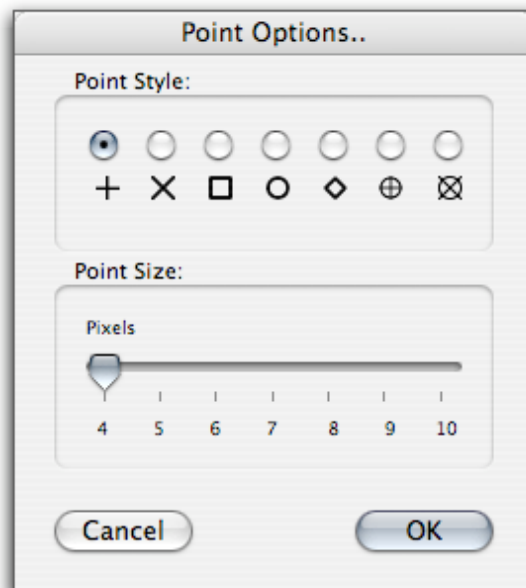
The **Smooth Polygon Drawing tool** allows you to create open or closed smooth polygon shapes with more than two sides.

Opening Symbol Libraries

You can select which version of PowerCADD/PowerDraw Symbol Libraries to be opened.

New Reference Points

PowerCADD 7 provides a variety of types of point graphics (and sizes).



New Parallel Offset Tools

A new Parallel Offset icon and a new Parallel Line tool has been added.

A new **Get Object Attributes** option has been added to Parallel Offset where the attributes of the new, offset object will match the attributes of the original, source, object. All attributes, as defined in the Attributes floating window, are matched including opacity and shadow settings.

A parallel offset of objects can now be completed **inside of a group**. This includes symbols which are inserted into a drawing as a Group.

New Trim / Extend Tool Features

The Trim/Extend tool may now be used to trim or extend lines and arcs to rectangles, rotated rectangles, open or closed polygons, and numerous Line-Arc, Arc-Arc, Arc-Circle or Line- Circle combinations

An object outside a group may be trimmed or extended to an object inside a group.

The Trim/Extend tool may now be used to trim or extend multiple line and arcs at the same time.

The **Extend Arc** tool functions of PowerCADD 6 have been integrated into the Trim/Extend tool.

Blend Tool

If the first object selected to be blended includes a shadow, that shadow is applied to all blended objects. Opacity settings for object fill and pen attributes are also blended.

Snap Shot and Fence Cut

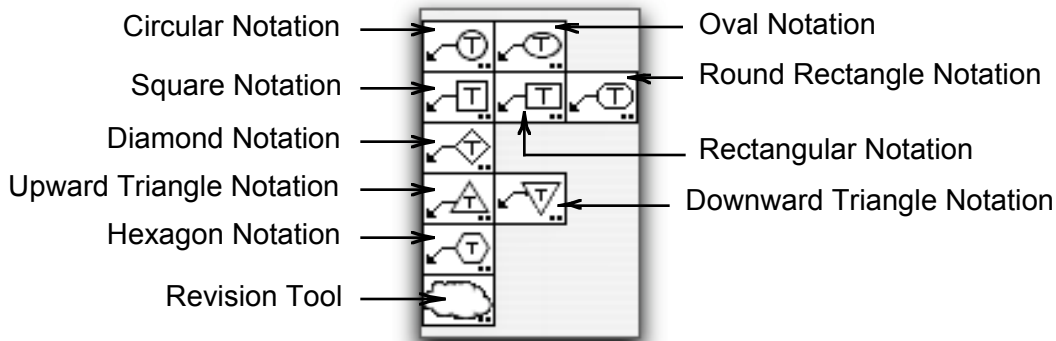
SnapShot and Fence Cut settings now retain scale information. Use Paste Special, At Scale, to automatically re-scale the Fence Cut or Fence Snap Shot data when pasting into a new or existing drawing. Layer Scale settings take precedent over Drawing Setup scale when performing the Fence Cut or Snap Shot operation.

Selecting the **Door Insertion tool** can auto-switch to the Door Layer.

Selecting the **Window Insertion tool** can auto-switch to the Window Layer.

New Notation Tool palette

The new Notation Palette provides specialized tools for inserting various styles and options of bubble notes and revision notes in a drawing.



New Contextual Menus

Contextual Menus have been improved and expanded to allow the user to *Control* click on any drawing area, object or tool to get an intelligent set of options.

Contextual Menus now include new options:

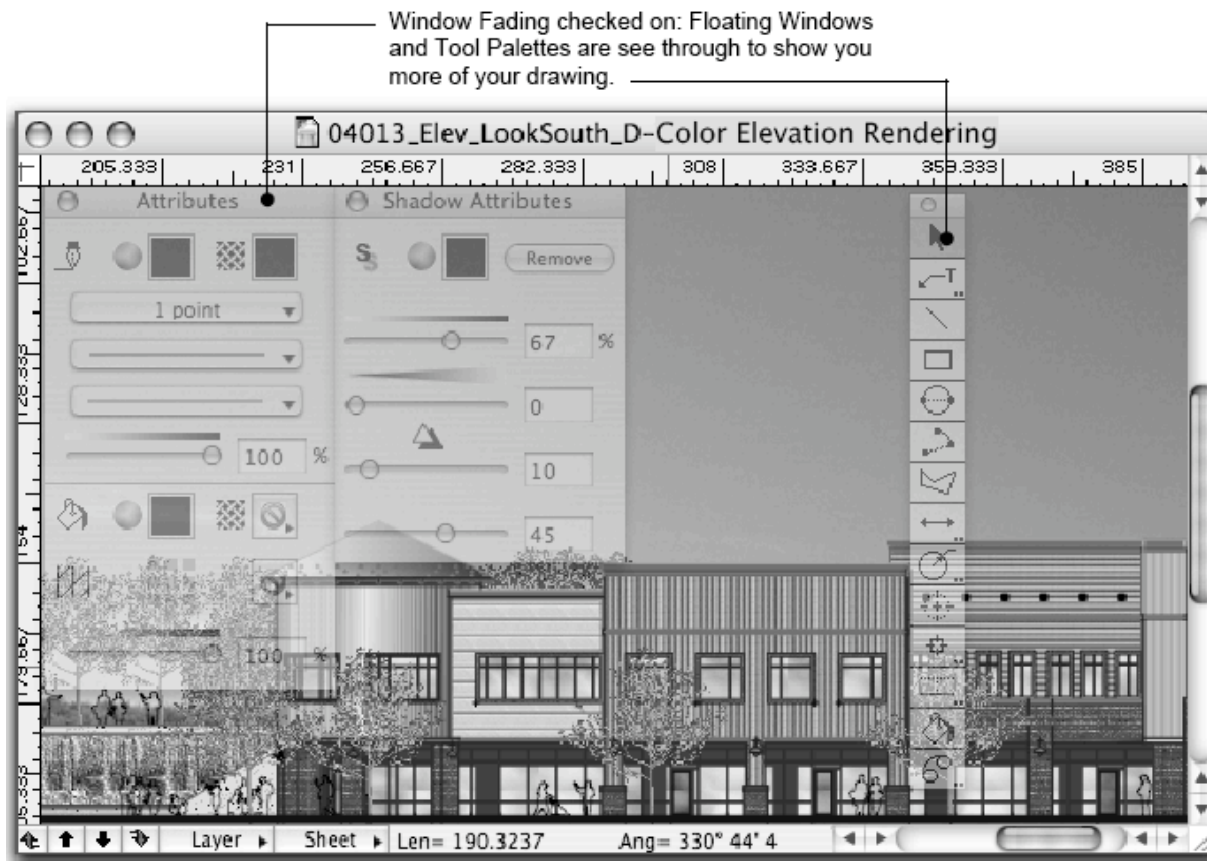
- **Styles:** Allows you to select from a list of user defined Attribute Styles.
- **Move To Layer:** Allows you to select which visible drawing layer an object should be moved to. Moving an object removes it from its current layer onto the selected layer in the same X,Y location.
- **Go To:** Allows you to change the active drawing layer to an existing objects layer.
- **Hatch Settings:** Allows you to control various hatch attributes of associative hatch patterns, including hatch origin, pen colour, line weight and scale.
- **Blossom** is a special contextual menu which brings up the standard PowerCADD tool palette anywhere on screen when you press *Control-Shift* and click. However, you can also create your own custom tool palette which appears instead of the default PowerCADD tool palette. A custom Blossom tool palette can be a very effective way to manage tools you use on a regular basis and save a significant amount of time when compared to moving in and out of multiple tool palettes during a typical drawing session. Multiple button mice are supported to provide easy access.
- **Paste Through Layers** now allows the user to specify if layer information should be remembered when copying and pasting information between drawings.

New PowerCADD Preferences

- **Global Attributes** allows you to share a common set of attribute menu items across all drawings. When checked, the menu display for the seven attributes are changed to the values established in the users Global Preferences: Pen (line weights), Color (fill and pen), Hatch patterns, Fill Patterns, Arrows, Dashes, and Attribute Styles. All menu choices displayed within the Attribute menu, Defaults Window, Contextual Menus, or the Attributes Window are changed for all new or existing drawings.

Sharing a Global Attributes Default Table file can be an effective method to establish standard attributes within an office or company.

- **Window Fading** controls whether floating windows and tool palettes can automatically fade. When checked, the Auto-Fade settings associated with each floating window or tool palette are enabled. Window fading allows you to see more of your drawing through the floating window or palette.



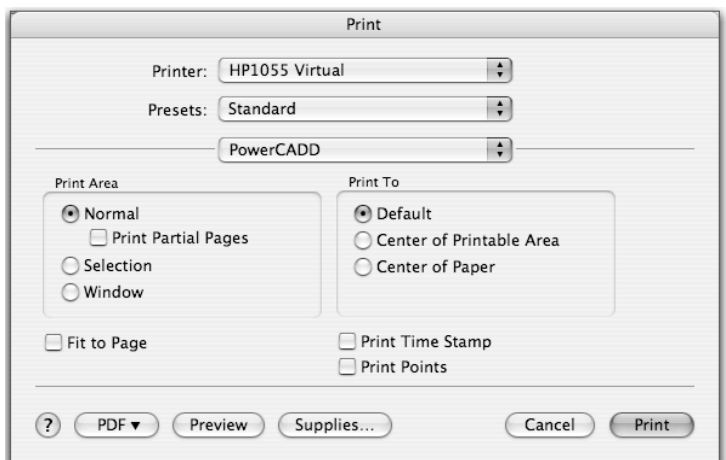
- **Magnetic Windows** controls whether floating windows and tool palettes can interact with each other or the edges of the computer screen. When checked, the Magnetic Edges settings associated with each floating window or tool palette are enabled. Magnetic Windows is an excellent method of organizing floating palettes and windows neatly to keep an orderly work space.

- **End Caps** allows you to specify what type of end cap is applied to open ended objects such as lines, arcs, polygons and Bézier curves. (None, Round or Square)
- **Palette Size** allows you specify the size of PowerCADD tool palettes. Select **Small** to display all tool palettes at approximately 30 pixels wide. Select **Large** to display all tool palettes at approximately 45 pixels wide.
- **Save Window Positions**, when activated, PowerCADD will remember the position and size of your drawing window when it is saved and closed.
- **Background Color** allows you to specify any colour for the drawing background. The background colour does not print.
- **Snap Color** allows you to specify any colour for the snap indicators used on screen and in the Snap indicator floating window.
- **Scale Points on Zoom Out** : When checked (on), points in the drawing inserted using the Reference Point tool will be rescaled smaller as the drawing is zoomed out.
- **Long Crosshair** allows you to turn the long crosshair on or off.
- **Snap Crosshair** works in conjunction with the Long Crosshair. With snap crosshair checked on, the cross hair will move in response to snap commands.
- **Snap Distance** is the distance in pixels in which an automatic snap will take place when your mouse is near a basic snap point.

Other New Menu Functions

File Menu - Open Recent that lists the last files which have been opened and saved by PowerCADD now has Clear Menu to clear the list.

A new **Print** dialogue and print options:



Edit Menu Functions

Objects Cut or Copied and Pasted between PowerCADD drawings will retain Shadow and Opacity attributes.

The Fence Cut tool supports scale settings when using Paste Special - At Scale.

When editing a group, all other data in the drawing is temporarily hidden and the Layer Window will display 'Editing Group'.

Tool Menu

New **Object to Bitmaps** settings allows the ability to specify the resolution and whether smoothing that should be applied.

Arrange Menu

- **Move To Layer** allows selection of which visible drawing layer an object should be moved to.
- **Hide** allows you to hide selected objects in a drawing. When the document is attempted to be printed, a warning dialogue appears to caution that hidden objects exist and will not be printed.
- **Show All** allows you to show all hidden objects in a drawing.
- **Height** allows you to align objects so the free space between the selected objects is equalized.
- **Width** allows you to align objects so the free space between the selected objects is equalized.

Layout Menu - Layers and Layer Management

The Layers Window floats on top of your drawing and can be moved and resized.

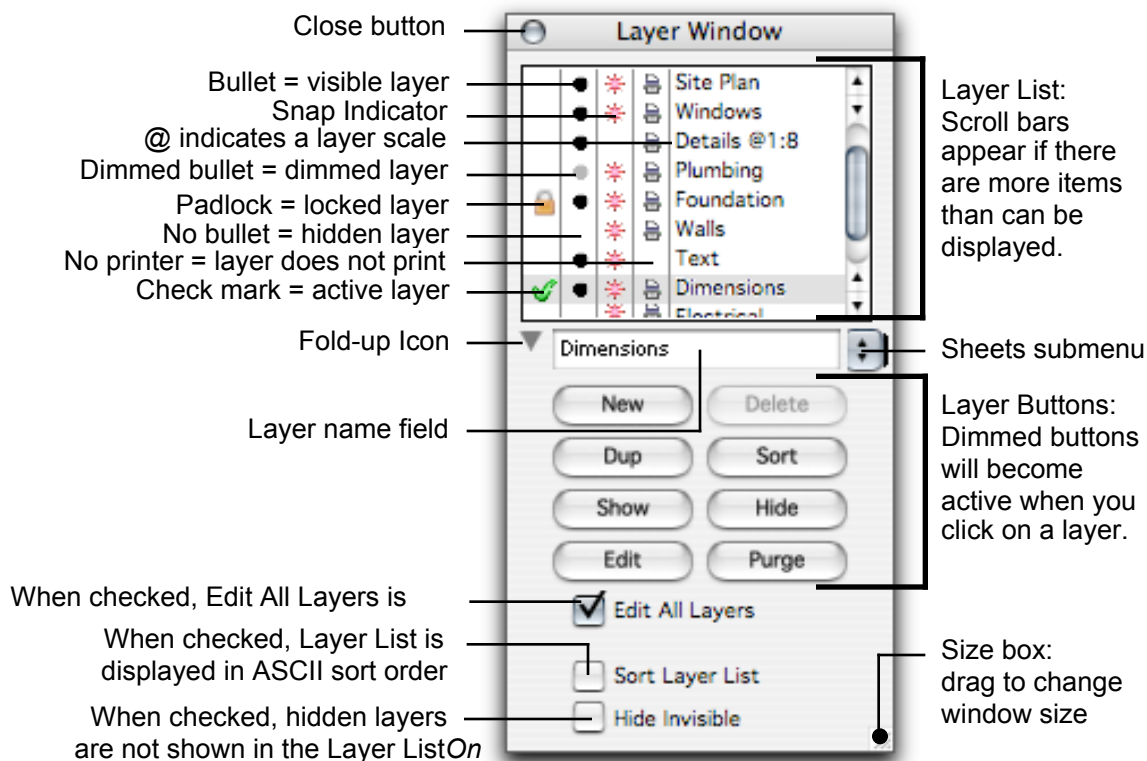
The Layer window can be stretched both horizontally and vertically with the use of the size box.

To adjust the **Auto-Fade** settings for the Layers window, press *Control* and click anywhere in the body of the Layer window except the Layer List.

- **Scroll Wheel Support** - For a mouse with a scroll wheel, use the scroll wheel to move up and down the layer list.

New Layer management functions including **Dup**, **Sort** and **Hide**.

- **Dup** creates a new layer which copies the layer attributes of the currently selected layer. Objects on the selected layer are copied.
- **Sort** changes the physical stacking order of all layers to display all layers in the layer list in an A-Z type order. To undo this operation, uncheck the Sort Layer List box. We recommend saving the unsorted layer list as a Sheet Setup prior to pressing *Sort*.
- **Hide** removes all layers with a hidden status from the Layer List. To restore the full list, uncheck the Hide Invisible box.



New Layer status columns for Snap status and Print status.

- The **Active Layer Column** now indicates both the Active layer (with a check mark) and locked layers with a lock icon.
- The **Visibility Layer Column** now shows a solid bullet for visible, a grey bullet for greyed layers and nothing for hidden layers. Note: Filled objects on dimmed layers will now appear transparent.
- The new **Snap Column** indicates whether snap to objects work on the layer.
- The new **Print Column** indicates whether information on the layer will be printed.

- The **Name Column** displays the name of a layer as entered in the Layer Name field. Layer scale or colour attribute settings are reflected in the displayed layer name.

You can customize which columns are displayed in the Layer List by *Control* clicking the Layer Window to show or hide columns.

You can now use Shift to select sequential layers and *Command*  click to select non sequential layers to change their attributes

New Layer Attributes

Access to setting Layer Attributes is now a simple *Control* click.

Layer Attributes now include **Opacity** settings and the choice of OS X's colour palette or PowerCADD's internal colour palette.

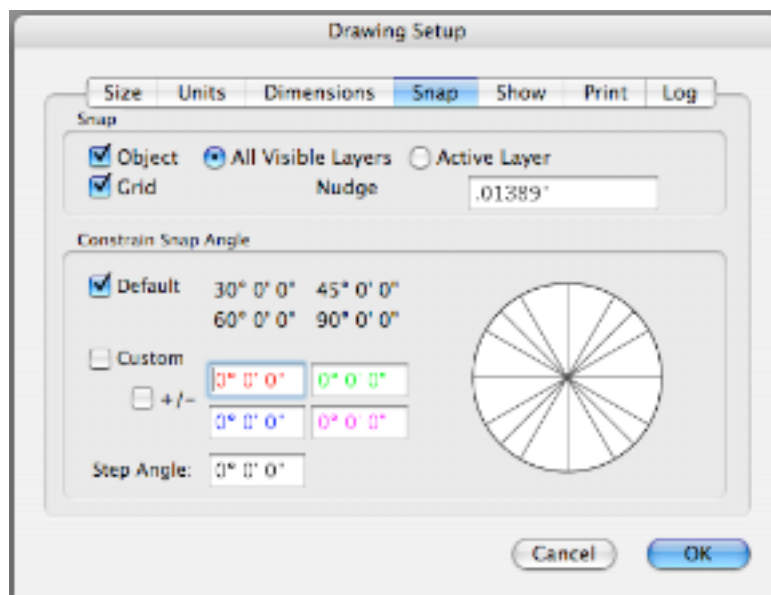
Opacity controls to what degree information is hidden or revealed below the layer.

Layer Attribute settings, with the exception of Layer Scale, are now remembered with Sheet Setups.

Managing **Sheets** was made easier in V6 with access to a Sheets pop up window within the Layers window. In v7, Sheet names can be changed within the Sheets pop-up with a simple *Option* clicking on the listed Sheet name to be changed.

Drawing Setup - Snap

The new **Snap** dialogue provides new Custom snap angles access and an interactive, self explanatory graphics. The new **Snap Angle** interface provides multiple, user determined Fixed and Step angle settings.



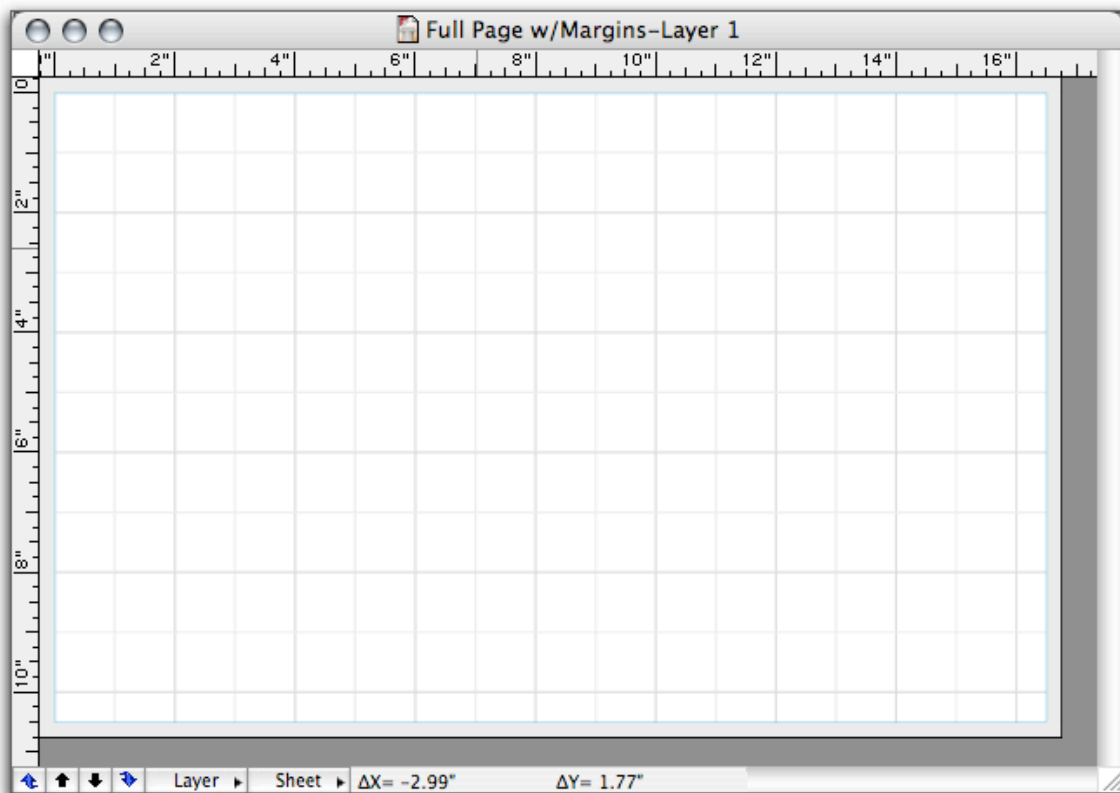
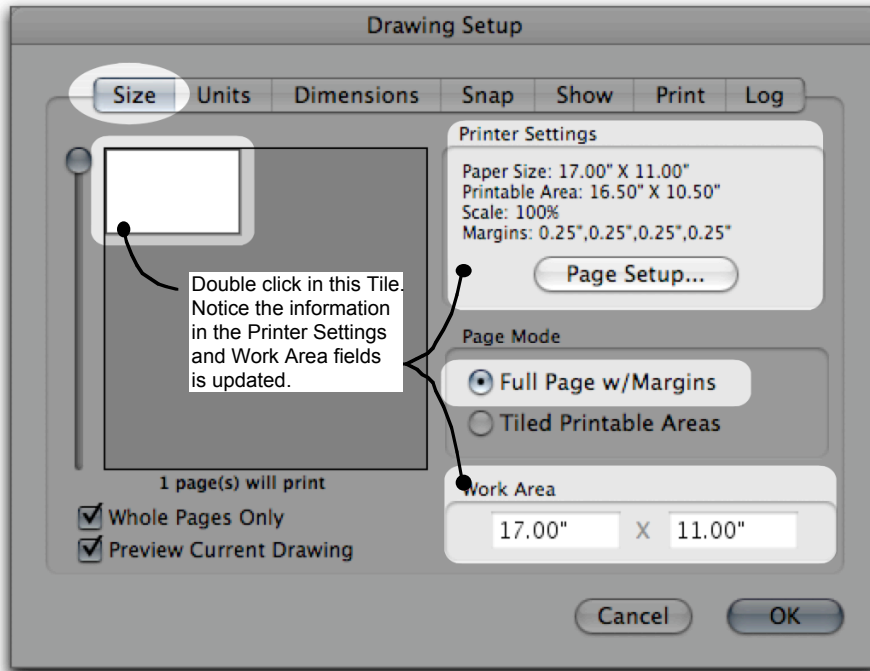
Drawing Set up - Size

The New **Drawing Set Up - Size** interface includes:

- Full Page (a single sheet) with visible white Margins.
- Tiled Printable Areas of multiple sheets of paper

Printer Settings and Work Area

Both the current print settings **and** the physical drawing area are displayed in the Drawing Set Up's Size dialogue.



Drawing Setup - View Menu

View Menu now includes a **Hide/Show Transparency** feature to compliment the new **Opacity** capability and a **Hide/Show Shadows** capability to compliment the new **Shadows** capability.

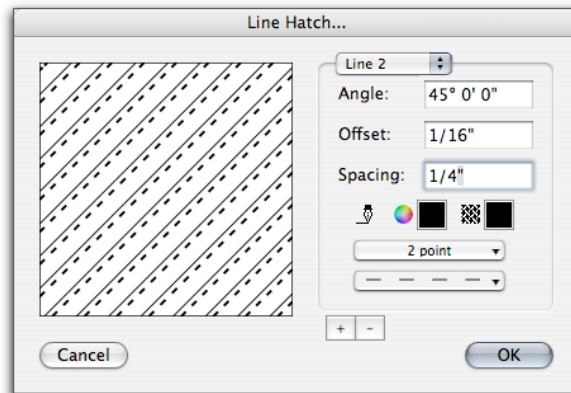
Attribute Menu

- **Color Attributes**

All OS X colour attributes and its attribute editing are accessible.

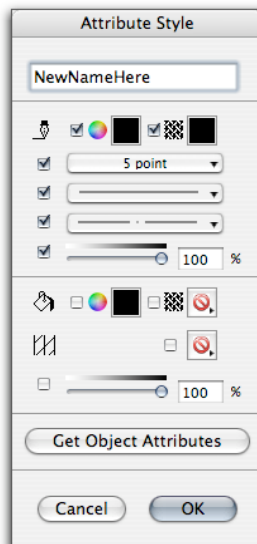
- **Hatch Patterns**

Custom, repeating Hatch patterns can be created in scale using polygons and now with lines. Hatch patterns are associative and can re-scale when the object containing them are rescaled. Hatch patterns now draw with the **speed** of fill patterns. The attributes of a Hatch Pattern can be edited for line colour, origin and scale.



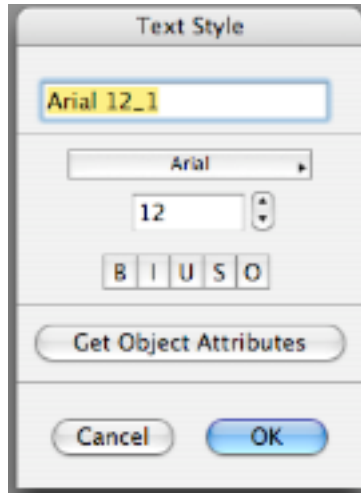
- **Attribute Styles**

v7 introduces the ability to save combinations of Attributes as a saved and user named style set. Any combination of pen weight, colour, fill pattern, colour, opacity and/or shadow can be saved as a style set.

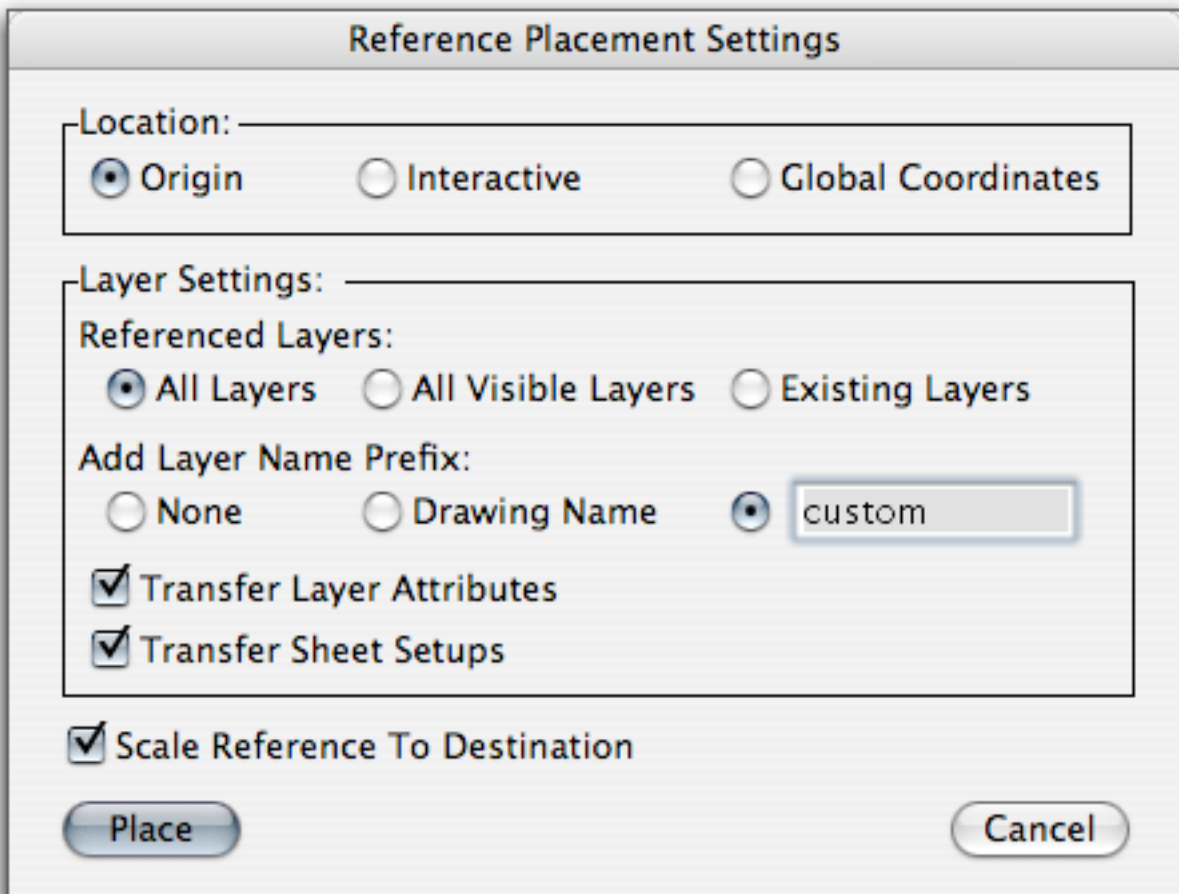


- **Text Styles**

v7 introduces a new, comprehensive “one stop” interface to create, name and save text styles, enabling you to choose all characteristics of the text style you wish in one simple dialogue, including the ability to highlight text in a document and capture its complete style attributes.



References Menu



Symbol Instances and PDFs included in referenced documents are now included in the master document.

Referenced Documents

Layers from referenced documents can now be prefixed through a simple selection of options - Drawing Name or a Custom prefix that you determine.

All Layer Attributes (except opacity) from referenced documents can now be transferred and maintained in the master document.

Sheet Setups from referenced documents can now be transferred to the master.

The names for all referenced documents are appended to the Reference Menu allowing updates of just specific referenced documents in addition Update All referenced documents.

Binding reference documents in the master document is now a simple command.

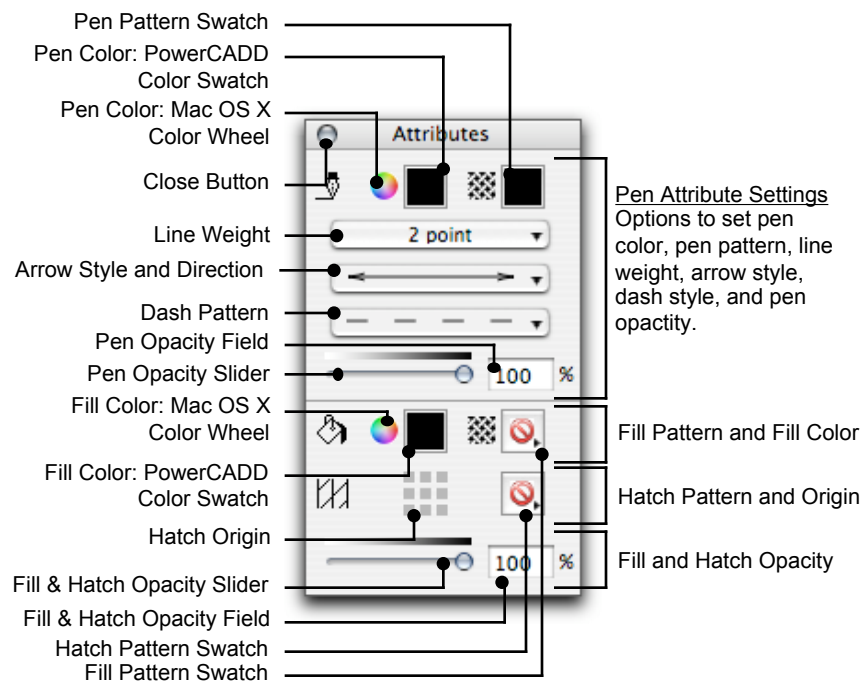
Automatically locating referenced files is now more robust even through networks.

Links to referenced documents, where links have been lost, are now simply re-linked and found using standard OS X Finder dialogues.

Floating Windows

Attributes Window

v7 introduces a new, all inclusive Attribute window to enable bypassing the need to use the Attribute Menu. Both the OS X and PowerCADD's Color Swatch are accessible. New features include sliders for Pen Opacity and for Fill & Hatch Opacity.

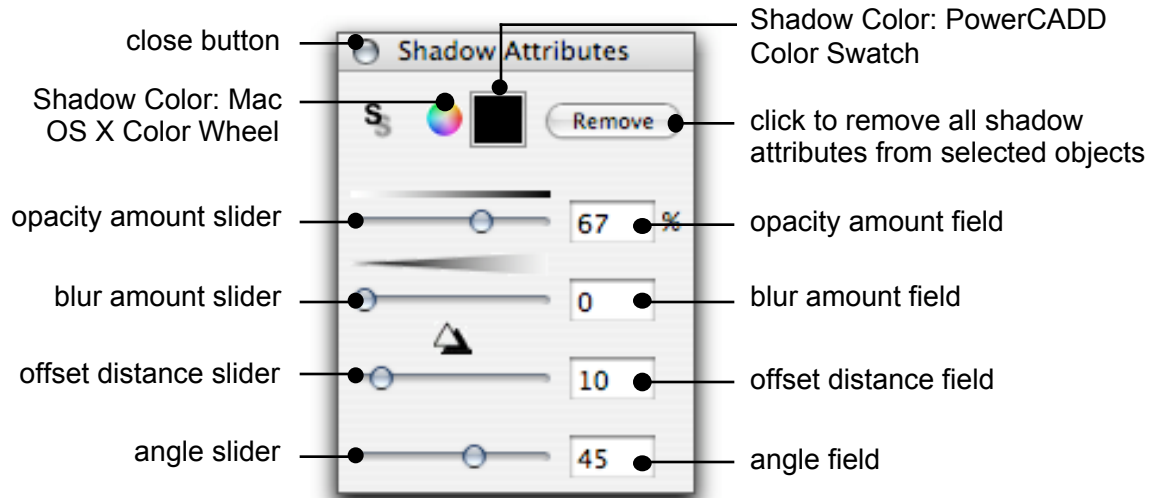


Dimensions Window

Optional fractional dimensions are now available to enable one above the other fractions.

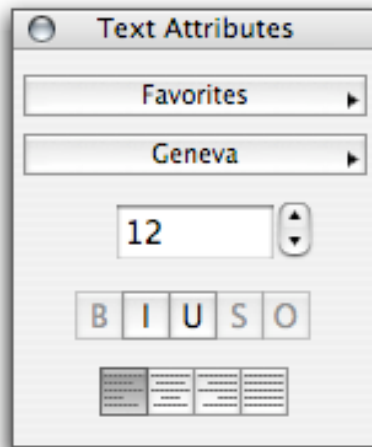
Shadow Attribute Window

PowerCADD v7's new Shadow Attributes can be edited directly with this window. It includes direct access to both OS X's colour wheel and PowerCADD's Color Swatch for stunning colour tinted, natural shadows.



Text Attributes Window

The new Text Attribute Window permits direct application of store favourite text styles and a "one stop" access to all fonts and text attributes for direct editing of text and text tools within a drawing



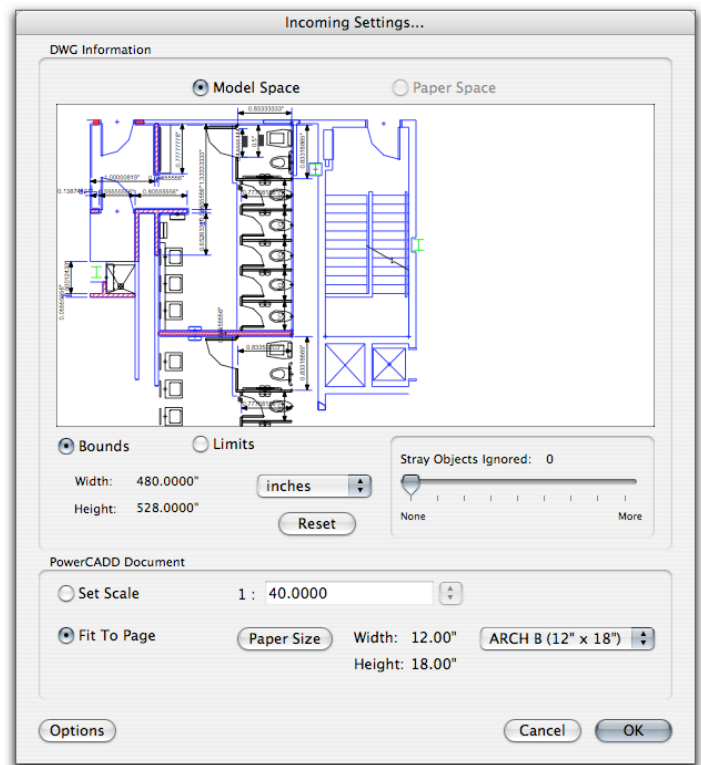
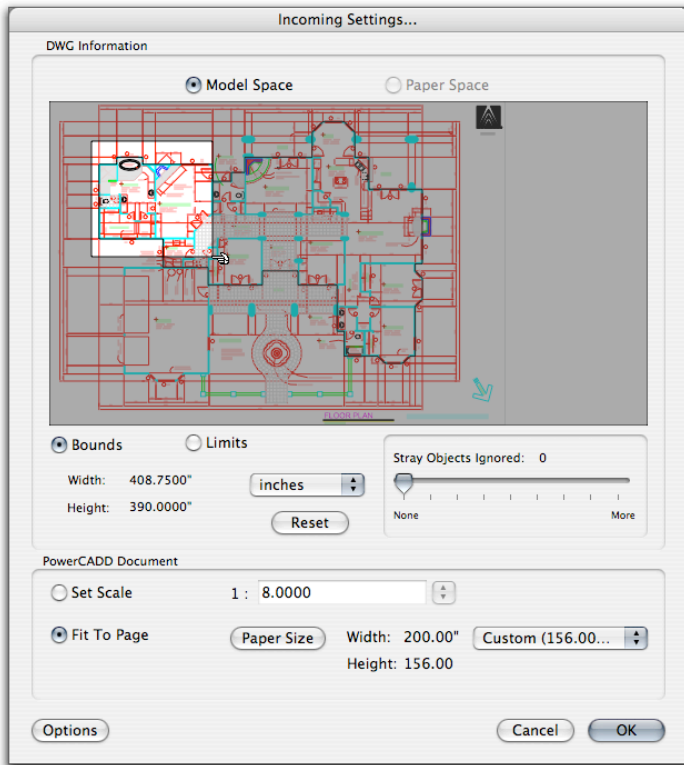
Help Menu

Check for software updates allows choosing to check for any PowerCADD updates automatically over the internet in either Daily, Weekly, or Monthly intervals.

DWG and DXF Translation

The New PowerCADD v7 DWG & DXF translator enables reading all versions of AutoCAD Release 10 through 2006.

The new DWG & DXF translator dialogue shows a visual image of the file being translated to enable you to select all or a portion of the file to be translated.



The new DWG translator provides a warning and a listing of any reference files that have been X-ref'd to the file being translated.

And yes, there is more to make PowerCADD v7 easier to use.

Btw Since this document is a pdf, you CAN use zoom to zoom in on the graphics.