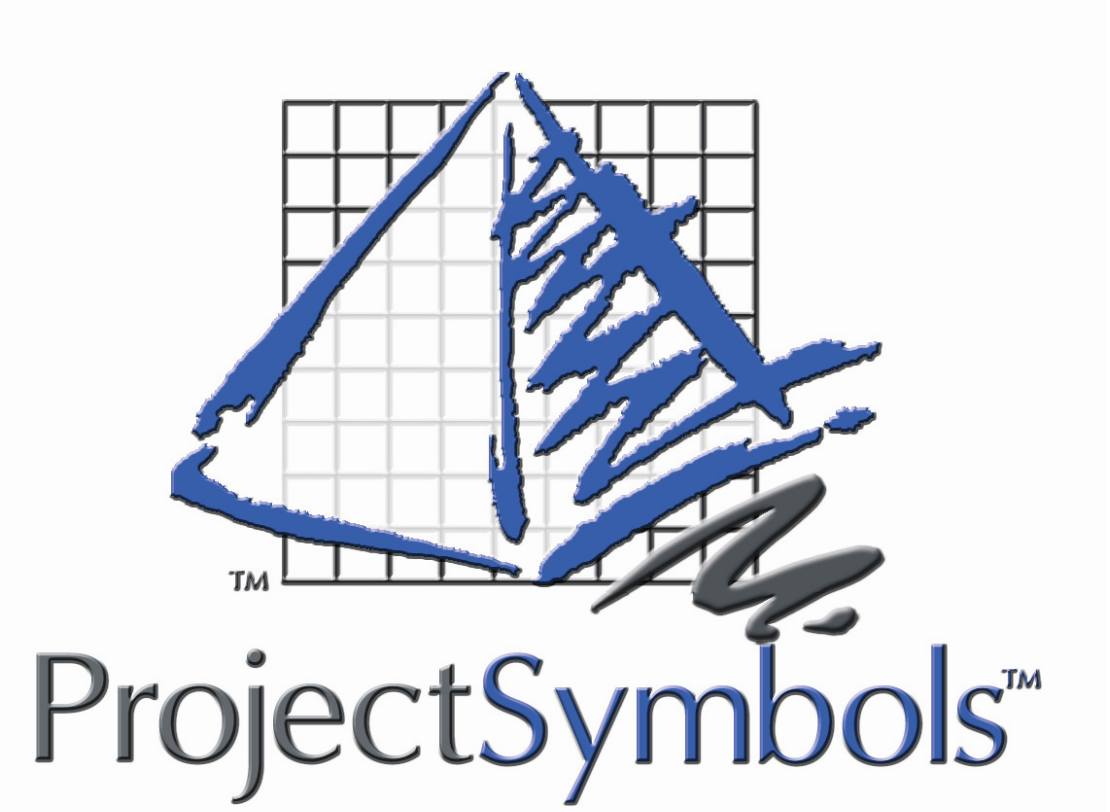
ProjectSymbols



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ProjectSymbols

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ProjectSymbols

Getting Started

In this chapter you will learn what ProjectSymbols is. You will also learn which toolbars and pull-down menus are related to ProjectSymbols and what each specific button does.

Introduction

What is ProjectSymbols?

As a design professional, you know the value of presenting your clients with graphic representations of their projects. ProjectSymbols provides an assembly of symbol libraries in 2D or 2D / 3D that graphically represent items from major furniture manufacturer catalogs. The ProjectSymbols full-labeled libraries are invaluable for the placement of "intelligent" 2D and 3D symbols in space planning and for creating installation drawings, renderings and takeoffs.

AutoCAD-compatible the symbol libraries utilize the many layers available in AutoCAD by dispersing the different product types on an abundance of different creation layers. The separation of product type and text on different layers permits you a greater degree of flexibility in the drawing output.

Using the Toolbars

ProjectSymbols adds two toolbars in addition to the AutoCAD toolbars you already have loaded. The toolbar provides quick mouse access to many of the ProjectSymbols utilities used within AutoCAD. Moving the mouse cursor over a toolbar button will cause a tool tip to appear that gives a brief description of the action that will be performed.

PSPlace by: ProjectMatrix Toolbar

Button:
Name: Catalog Viewer
Typed Command: PSPLACE
Description: Opens a manufacturers electronic catalog for placement of symbols.

Button:
Name: Part Number
Typed Command: PN
Description: Places the appropriate symbol by entering the manufacturers part number.

Button:
Name: Option/Re-Option Block
Typed Command: PSREOPT
Description: Allows you to add options or to re-option a block.

PSPlace Toolbar

Button:
Name: Change Z
Typed Command: CHANGEZ
Description: Adjusts the Z height of a symbol.

Button:
Name: 2Dto3D
Typed Command: 2DTO3D
Description: Coverts 2D symbols to 3D symbols.

Button:
Name: Plot3D
Typed Command: PLOT3D
Description: Allows you to create a "block" of symbols in 3D view and insert into a plan view.

Button:
Name: Hide
Typed Command: HIDE
Description: Generates a hidden line view of 3D symbols.

Flyout Button:
Name: Shade
Typed Command: SHADE
Description: Generates a shaded view of 3D symbols.

Button:
Name: Replace
Typed Command: REPLACE
Description: Replaces a symbols with another symbol.

Button:
Name: Make Special
Typed Command: SPECIAL
Description: Allows the making of a custom part that is not part of the standard product line. You can also make typicals.

Button:
Name: Sifout
Typed Command: SIFOUT
Description: Generates a SIF file of the selected symbols.

PSPlace Toolbar

Flyout Button:
Name: No Text Panel Plan
Typed Command: na
Description: Generate a panel plan with no text for installation.

Flyout Button:
Name: No Text Component Plan
Typed Command: na
Description: Generates a component plan with no text for installation.

Flyout Button:
Name: No Text Electrical Plan
Typed Command: na
Description: Generates a electrical plan with no text for installation.

Flyout Button:
Name: No Text All Plan
Typed Command: na
Description: Generates an all plan with no text for installation.

Flyout Button:
Name: No Text General Plan
Typed Command: na
Description: Generates a general plan with no text for installation.

Flyout Button:
Name: Texted Panel Plan
Typed Command: na
Description: Generates a panel plan with text for installation.

Flyout Button:
Name: Texted Component Plan
Typed Command: na
Description: Generates a component plan with text for installation.

Flyout Button:
Name: Texted Electrical Plan
Typed Command: na
Description: Generates a electrical plan with text for installation.

PSPlace Toolbar

Flyout Button:
Name: Texted All Plan
Typed Command: na
Description: Generates a all plan with text for installation.

Button:
Name: Osnap Mode ON/OFF
Typed Command: na
Description: Sets your running osnap to node.

Button:

Name: Change MFG
Typed Command: MFG
Description: Changes the current manufacturer.

Button:
Name: Set TAG1 & TAG2
Typed Command: SETTAGS
Description: Setting a tag allows you to tag symbols with information so when you do a SIFout they can be identified. All symbols placed after setting a tag will result in that the symbol will contain the set tag.

Button:
Name: Tag by Selection
Typed Command: TAGBYSEL
Description: Will allow you to tag symbols by a selection after they have been placed in the drawing.

PSUtilities Toolbar

PSUtilities by: ProjectMatrix Toolbar

Button:
Name: Globally Change Install Text Height and Width
Typed Command: na
Description: Allows you to edit the install text of a symbol.

Button:
Name: Edit Install Text
Typed Command: DDATTE
Description: Allows you to edit the install text of a symbol.

Flyout Button:
Name: Move Install Text
Typed Command: na
Description: Allows you to move the install text of a symbol.

Flyout Button:
Name: Scale Install Text
Typed Command: na
Description: Allows you to scale the install text of a symbol.

Flyout Button:
Name: Rotate Install Text
Typed Command: na
Description: Allows you to rotate the install text of a symbol.

Button:
Name: Copy
Typed Command: COPY
Description: Duplicates selected objects in a drawing.

Flyout Button:
Name: Copy Rotate
Typed Command: CR
Description: Duplicates selected objects in a drawing then rotates the duplicated objects.

PSUtilities Toolbar

Button:
Name: Rotate
Typed Command: ROTATE
Description: Moves selected objects around a base point

Button:
Name: Move
Typed Command: M or MOVE
Description: Moves selected objects at a specified distance in a specified direction.

Flyout Button:
Name: Move ROTATE
Typed Command: MR
Description: Moves selected objects at a specified distance in a specified direction then rotates the objects.

Button:
Name: Erase
Typed Command: E or ERASE
Description: Removes selected objects from a drawing.

Button:
Name: Zoom Window
Typed Command: Z or ZOOM
Description: Zooms to display an area specified by two opposite corners of a rectangular window.

Flyout Button:
Name: Zoom Extents
Typed Command: Z or ZOOM
Description: Zooms to display the drawing extents. You can use ZOOM Extents transparently, but it always regenerates the drawing.

Flyout Button:
Name: Zoom Previous
Typed Command: Z or ZOOM
Description: **Z**ooms to display the previous view.

Flyout Button:
Name: Zoom In
Typed Command: Z or ZOOM
Description: Increases the apparent size of objects in the current viewport.

PSUtilities Toolbar

Flyout Button:
Name: Zoom Out
Typed Command: Z or ZOOM
Description: Decreases the apparent size of objects in the current viewport:

Flyout Button:
Name: Zoom Transparent
Typed Command: 'Z of 'ZOOM
Description: Allows you to use the zoom command while another command is active.

Button:
Name: Layer Control
Typed Command: LA or LAYER
Description: The layer control dialog box will allow you to manage layers and layer properties. This is where you will create and modify layer properties such as layer names and colors.

Flyout Button:
Name: Freeze by object
Typed Command: LAYOFF
Description: Freezes the current layer to whatever object you select was created on.

Flyout Button:
Name: Current by Object
Typed Command: LAYERSET
Description: Sets the current layer to whatever object you select was created on.

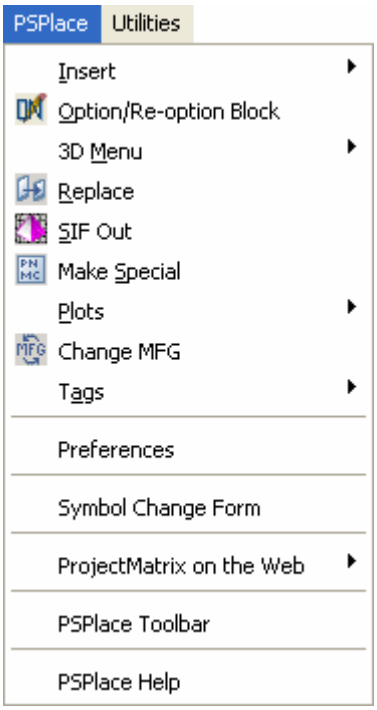
Flyout Button:
Name: Change by Object
Typed Command: CHLAYER
Description: Changes the selected objects properties to whatever object you select.

PSPlace Menu

Accessing the Pull-Down Menus

ProjectSymbols adds two pull-down menus to the AutoCAD toolbars you already have loaded. The pull-down menus provides quick access to all of the ProjectSymbols utilities used within AutoCAD. Listed below are the detailed definitions for each of the available commands.

PSPlace Menu:



Insert

- **By Catalog Viewer** – Opens a manufacturers electronic catalog for placement of symbols.
- **By Part #** - Places the appropriate symbol by entering the manufacturers part number.
- **Option/Re-option Block** – Allows you to add options or to re-option a block.

3D Menu

- **DDVPoint** – Allows you to set the viewing angle relative to the World Coordinate System (WCS) or a User Coordinate System (UCS).
- **3D Orbit** – Allows you to rotate your view in any direction.
- **Isoplane** – Views your drawing from an isometric view
- **Plan** – Views your drawing looking straight down.
- **Hide** – Generates a hidden line 3D symbols.
- **Shade** – Generates a shaded view of 3D symbols.
- **2Dto3D** – Coverts 2D symbols to 3D symbols.
- **Change** Z – Adjusts the Z height of a symbol.
- **Plot3D** – Allows you to create a "block" of symbols in 3D view and insert into a plan view.

Replace – Replaces a symbol with another symbol.

SIF Out – Generates a SIF file of the selected symbols.

PSPlace Menu

PSPlace Menu: (continued)

Make Special – Allows the making of a custom part that is not part of the standard product line. You can also make typicals.

Plots

- **No-Text**
  - **Panels** – Generates a panel plan with no text for installation.
  - **Components** – Generates a component plan with no text for installation.
  - **Electrical** – Generates a electrical plan with no text for installation.
  - **All** – Generates an all plan with no text for installation.
  - **General** – Generates a general plan with no text for installation.
- **Texted**
  - **Panels** – Generates a panel plan with text for installation.
  - **Components** – Generates a component plan with text for installation.
  - **Electrical** – Generates a electrical plan with text for installation.
  - **All** – Generates an all plan with text for installation.

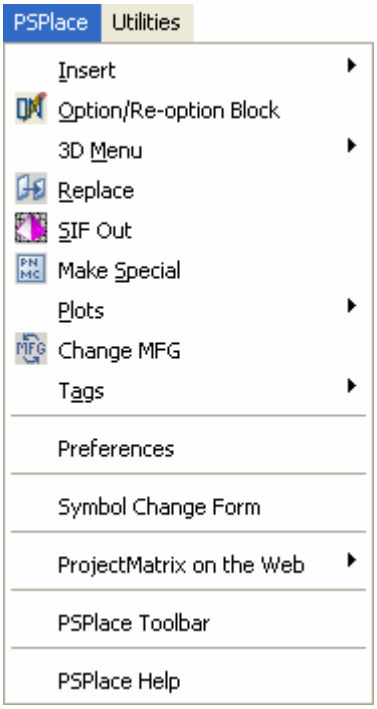
Change MFG – Changes the current manufacturer.

Tags

- **Set TAG1 & TAG2** – Setting a tag allows you to tag symbols with information so when you do a SIFout they can be identified. All symbols placed after setting a tag will result in that the symbol will contain the set tag.
- **Tag by Selection** – Will allow you to tag symbols by a selection after they have been placed in the drawing.

PSPlace Menu

PSPlace Menu: (continued)



Preferences – Allows you to change options specific to PSPlace.

Symbol Change Form – A correction form to be used when an error has been found with a symbol.

ProjectMatrix on the Web

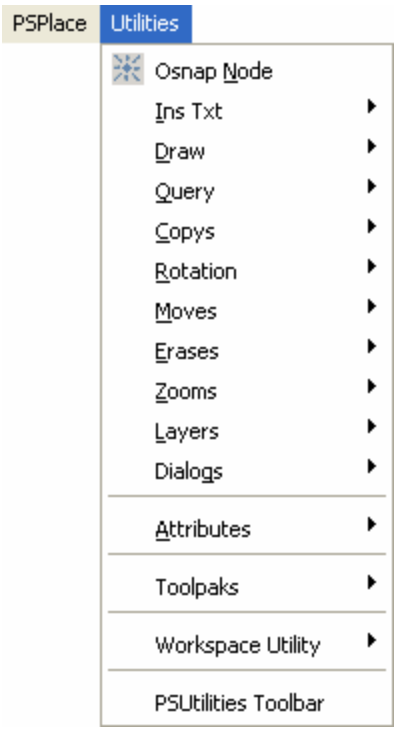
- **ProjectMatrix Home Page** – Website for ProjectMatrix.
- **ProjectSymbols FAQ** – Frequently asked questions about ProjectSymbols.

PSPlace Toolbar – Displays the PSPlace by: ProjectMatrix toolbar.

PSPlace Help – Help file containing information about using ProjectSymbols.

Utilities Menu

Utilities Menu:



Osnap Node – Sets running object snap to Node.

Ins Txt

- **Edit** – Allows you to edit the install text of a symbol.
- **Move** – Allows you to move the install text of a symbol.
- **Size** – Allows you to scale the install text of a symbol.
- **Rotate** – Allows you to rotate the install text of a symbol.

Draw

- **Line** – Creates a straight line between two points.
- **PLine** – Creates two-dimensional polylines.
- **MLine** – Creates multiple parallel lines.
- **Circle** – Creates a circle.
- **DText** – Places text on a drawing.

Query

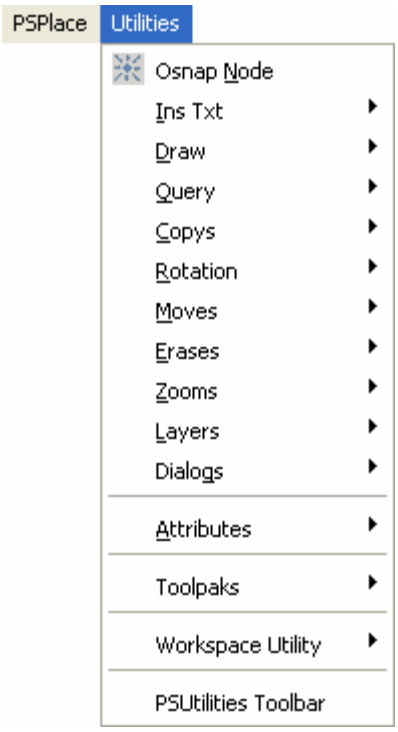
- **Dist** – Measures the distance and angle between two points.
- **Area** – Calculates the area and perimeter of objects or of defined areas.
- **Object** – Displays database information for selected object.

Copys

- **Copy Last** – Duplicates the last object in the drawing.
- **Copy Cr/Wn** – Forces a selection window or crossing.
- **Copy Rotate** – Duplicates selected objects in a drawing then rotates the duplicated objects.
- **Copy 1** – Makes one duplicate of objects.
- **Copy Mul** – Makes multiple duplicates of objects.

Utilities Menu

Utilities Menu: (continued)



Rotation

- **Rotate Last** – Rotates the last object in the drawing.
- **Rotations**
  - **0 - 345** – Rotates objects this amount.

Moves

- **Move Cr/Wn** – Forces a selection window or crossing.
- **Move Rotate** – Moves selected objects at a specified distance in a specified direction then rotates the objects.
- **Move 1** – Moves one object.

Erases

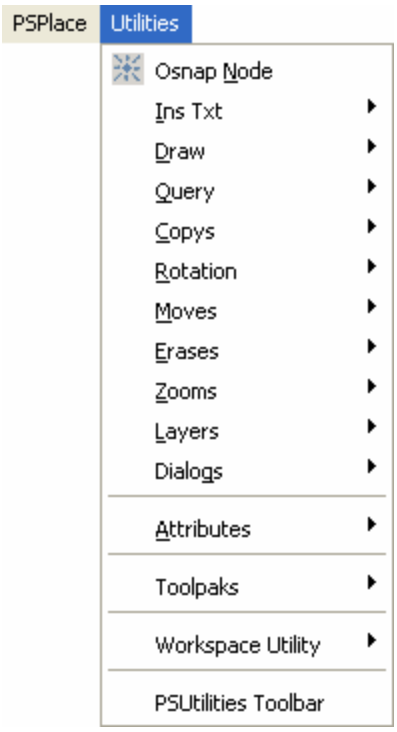
- **Erase Cr/Wn** – Forces a selection window or crossing.
- **Erase 1** – Erases one object.

Zooms

- **Zoom Win** – Zooms to display an area specified by two opposite corners of a rectangular window.
- **Zoom Ext** – Zooms to display the drawing extents. You can use ZOOM Extents transparently, but it always regenerates the drawing.
- **Zoom Prv** – **Z**ooms to display the previous view.
- **Zoom In** – Increases the apparent size of objects in the current viewport:
- **Zoom Out** – Decreases the apparent size of objects in the current viewport:
- **Zoom Transparent** – Allows you to use the zoom command while another command is active.

Utilities Menu

Utilities Menu: (continued)



Layers

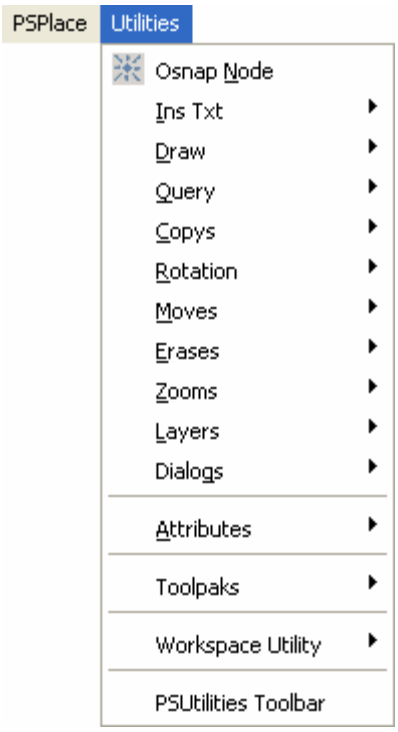
- **Display Layers** – Displays the layer control dialog box.
- **Freeze by Object** – Freezes the current layer to whatever object you select was created on.
- **Current by Object** – Sets the current layer to whatever object you select was created on.
- **Change by Object** – Changes the selected object's properties to whatever object you select.

Dialogs

- **AttDef** – Creates attributes.
- **ChgProps** – Allows you to change the properties of a object.
- **Grips** – Small squares that appear on objects you select. After selecting the grip, you edit the object by dragging it with the mouse instead of entering commands.
- **Insert** – Places a named block or drawing into the current drawing.
- **Modify** – Allows you to change the properties of a object.
- **Osnap** – Sets your running osnap to node.
- **Rename** – Allows you to rename objects within AutoCAD.
- **Units** – Allows you to set the primary units of a drawing.
- **Point Type** – Specifies the display mode and size of point objects.
- **View** – Displays different views of the drawing.
- **VPoint** – Sets the three-dimensional viewing direction.

Utilities Menu

Utilities Menu: (continued)



Attributes

- **Display On** – Turns on all attributes.
- **Display Off** – Turns off all attributes.
- **Edit** – Allows you to edit an attribute.

Toolpaks

The following toolbar sections are only enabled if the supporting Toolpak has been installed.

- **Allsteel**
- **AIS**
- **Haworth**
- **Herman Miller**
- **ICF**
- **Trendway**

Workspace Utility

- **Conversion Utility**
  - **ProjectWorkspace Symbol Conversion** Converts ProjectWorkspace exported drawings into ProjectSymbols blocks
- **Workspace Utility Toolbar** – Displays the ProjectWorkspace Utility toolbar.

PSUtilities Toolbar – Displays the Utilities by: ProjectMatrix toolbar.

Introduction

ProjectSymbols Introduction

In this chapter we will go over how to select the manufacturer you wish to work with, place symbols by catalog viewer, and place symbols by part number.

Selecting a Manufacturer

Select a Manufacturer

Before you start to place symbols into the drawing you must first select the manufacturer that you will be working with. There are three different places in ProjectSymbols where you can choose your manufacturer.

Figure 2-1
Select “Change MFG” from the PSPlace pull-down menu.

Figure 2-2
Click the icon located in the PSPlace toolbar.

Figure 2-3
Type MFG into the command line and press Enter.

Figure 2-1

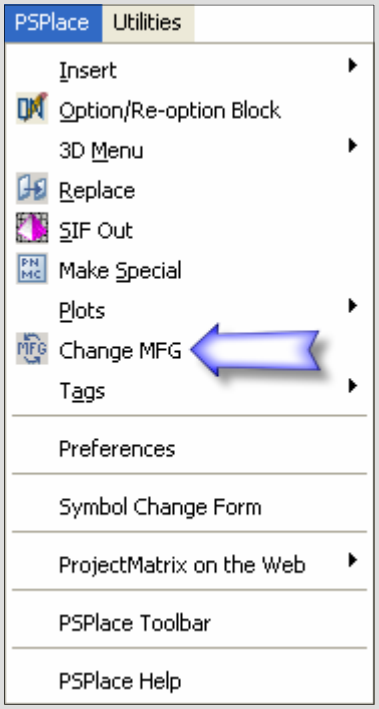


Figure 2-2

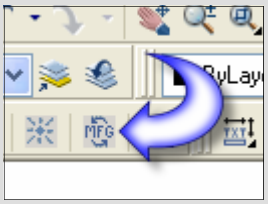


Figure 2-3

Selecting a Manufacturer

To select a manufacturer, simply highlight the name of the manufacturer you which to work with and click the OK button at the bottom of the window.

Figure 2-4

Above in Figure 2.4 we have selected the Generic Manufacturer. It is now set to the current manufacturer.

Placing a Symbol

Placing a Symbol

There are various different ways to place a symbol in ProjectSymbols. The first method is “Place by Catalog Viewer”. There are three places in Project-Symbols where you can execute this command.

Figure 2-5

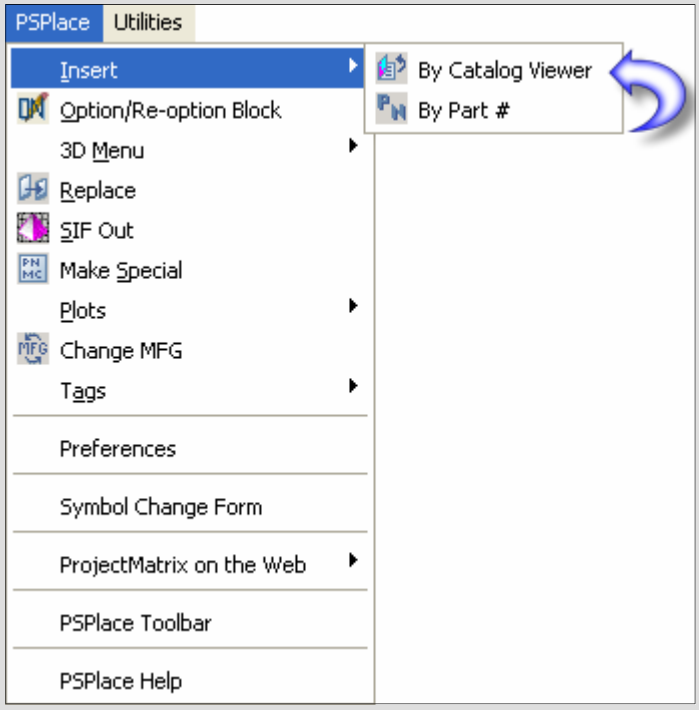


Figure 2-6

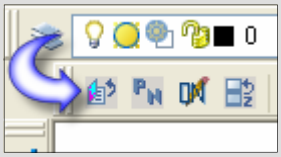


Figure 2-7

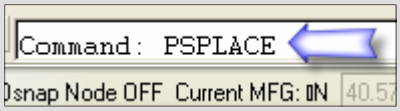


Figure 2-5
From the PSPlace pulldown menu select “Insert” → “By Catalog Viewer”

Figure 2-6
Click the “Place Symbol by Catalog Viewer” icon located on the PSPlace toolbar.

Figure 2-7
Type PSPLACE in the command line and press Enter.

Place Symbol by Catalog Viewer

The Catalog Viewer is designed to improve the way you place symbols that you may not be familiar with. It allows the user to drill down to a part number using the electronic catalog. When opened, the Catalog Viewer window displays the current manufacturer at the top of the window. Following the manufacturer name will be the date that the catalog was updated. Below the date is the manufacturer's lines of products. Each line can be selected and the user can drill down through the catalog to select the desired part.

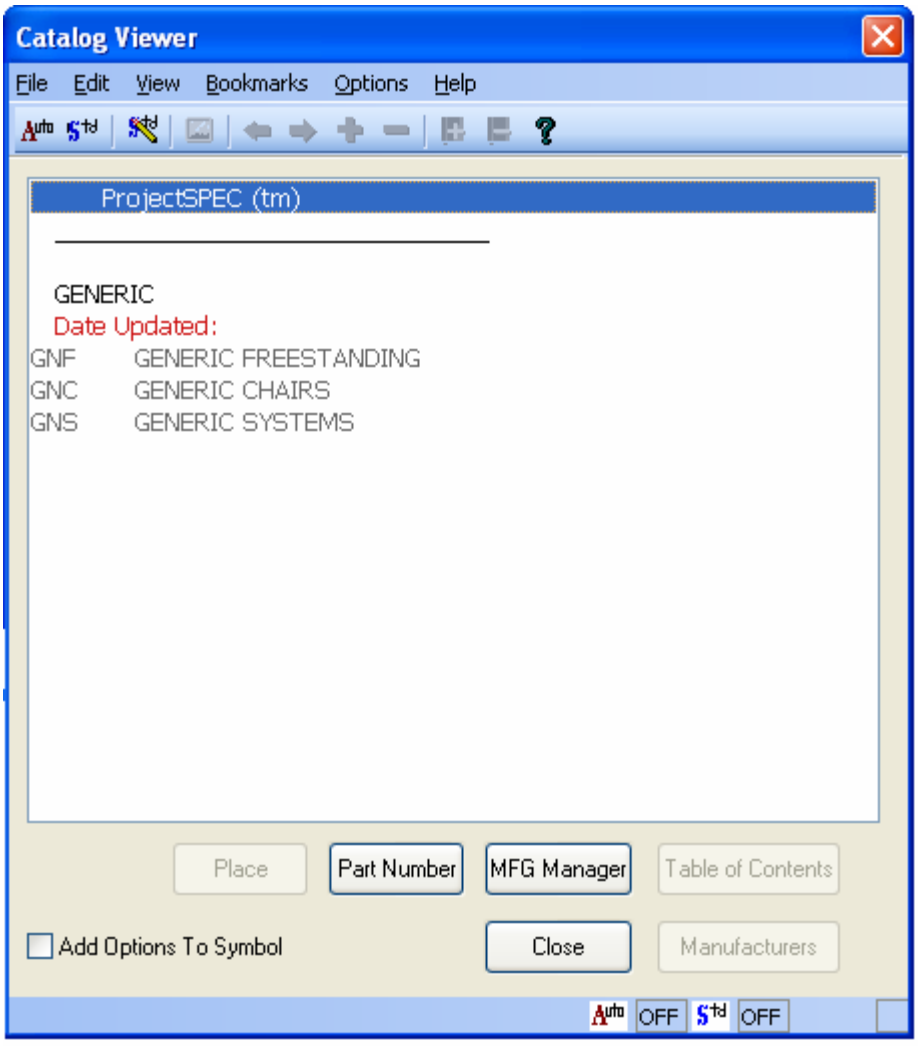


Figure 2-8

Place Symbol by Catalog Viewer

In the Figure 2-9 I have chose the “GNS Generic Systems” catalog, and selected Panels—Fabric Over Steel—Powered—48” High. The 48” High selection is the last available option for this particular part. When I double click it the program will take me to the part number list.

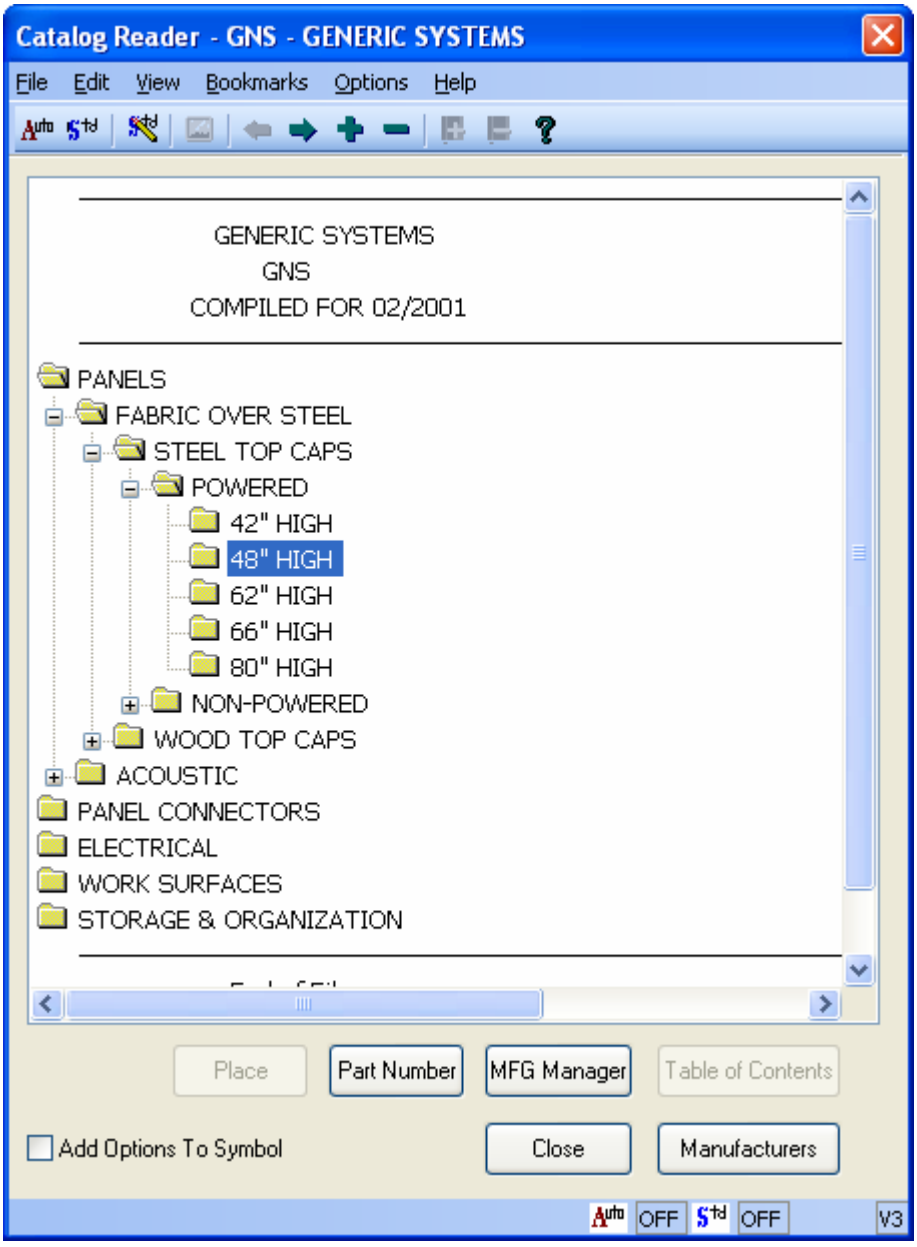


Figure 2-9

Place Symbol by Catalog Viewer

The Catalog Reader now displays the available part numbers that meet the criteria of the options I selected in Figure 2-9. Here I can choose which part number I want to insert. Figure 2-10 shows that I have selected the PN4248SFP part number. Now I'll click the "Place" button to place the symbol into my drawing.

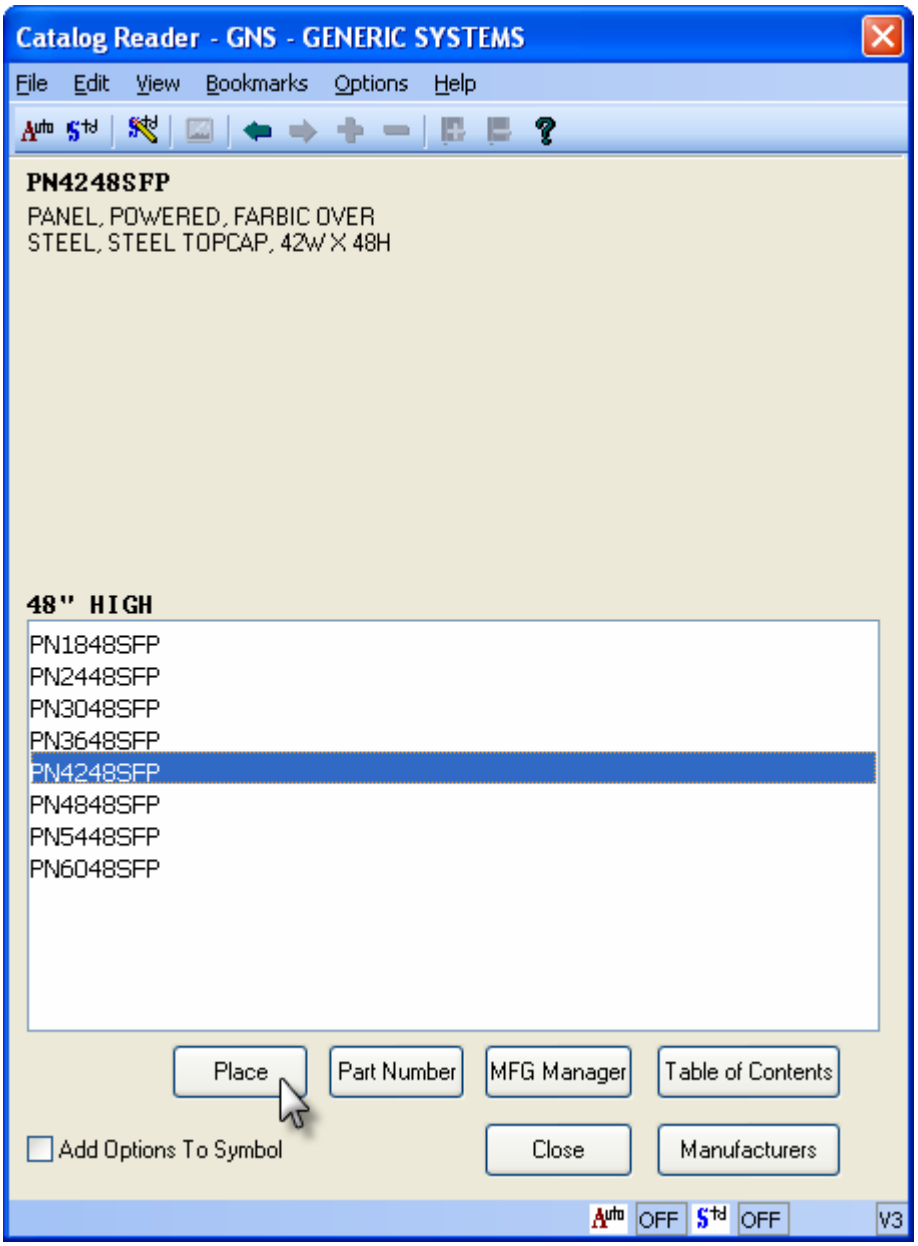


Figure 2-10

Place Symbol by Catalog Viewer

If this is the first time a symbol has been placed since AutoCAD has been started, the Symbol Scale dialog box will appear. If your drawing is scaled 1:1 then click OK. Otherwise you can set the symbols to the same scale as the drawing in this box.

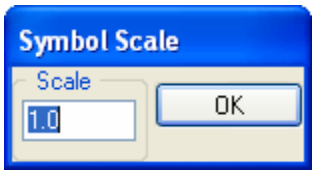


Figure 2-11

Once you have clicked OK, the Symbol Scale dialog box will disappear and the symbol you chose will be attached to your cursor. Click once to place the symbol, now choose your rotation angle and click again to finish the placement routine. Here you can choose to place the symbol again or click your right-mouse button to get back to the Catalog Reader window.

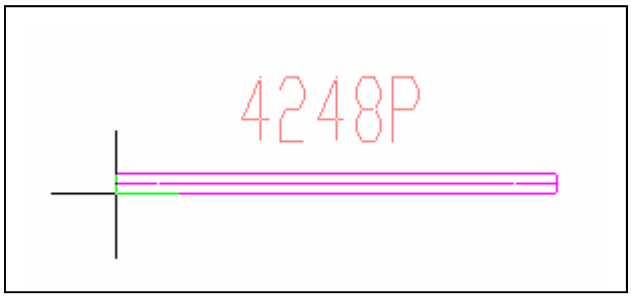


Figure 2-13

Tips and Tricks

When I am planning out an office space I find it easier to put in one type of each symbol that I need and then use AutoCAD commands to copy, rotate, and move, the pieces into place. This can drastically speed up the time it takes to place each part and gives me the ability to utilize AutoCAD's snapping commands to make sure that my parts are placed correctly.

Place Symbol by Part Number

Placing a Symbol by Part Number

Another way to place a symbol with ProjectSymbols is, “Place symbol by Part Number”. This placement method is much faster than placing a symbol through the Catalog Reader if you already know the part number of the symbol you wish to place. There are three places in ProjectSymbols where you can execute this command.

Figure 2-14

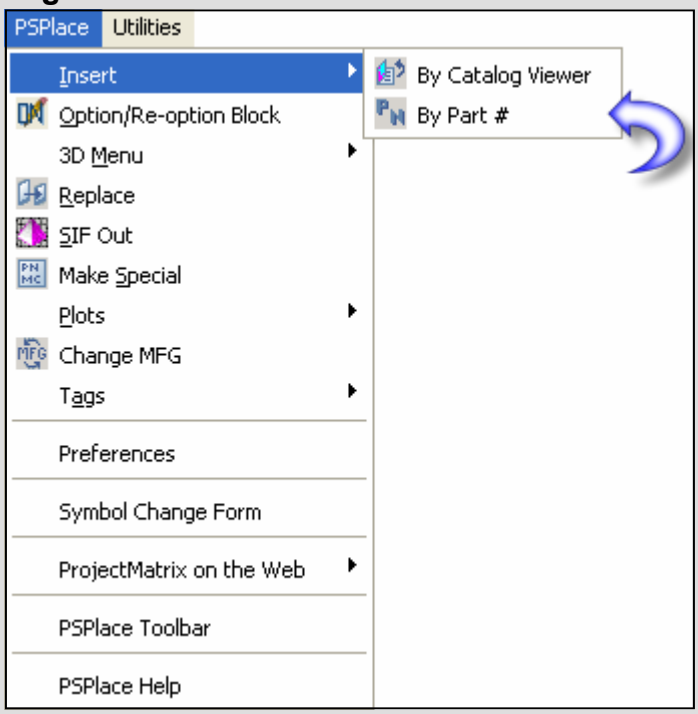


Figure 2-15

Figure 2-16

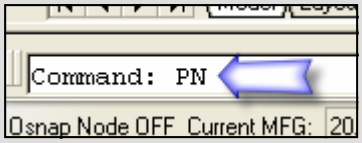


Figure 2-14
From the PSPlace pulldown menu select “Insert” → “By Part #”

Figure 2-15
Click the “Place Symbol by Part #” icon located on the PSPlace toolbar.

Figure 2-16
Type PN in the command line and press Enter.

Place Symbol by Part Number

The Place by Part Number dialog box is very simplistic but very powerful. To place a symbol in your drawing simply type the full part number into the box and click the “Place” button.

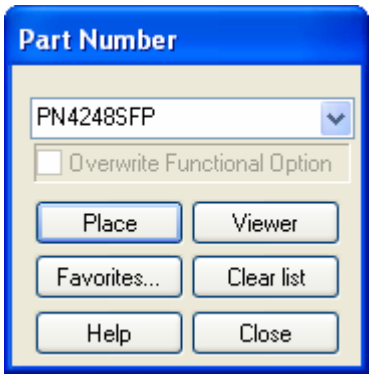


Figure 2-17

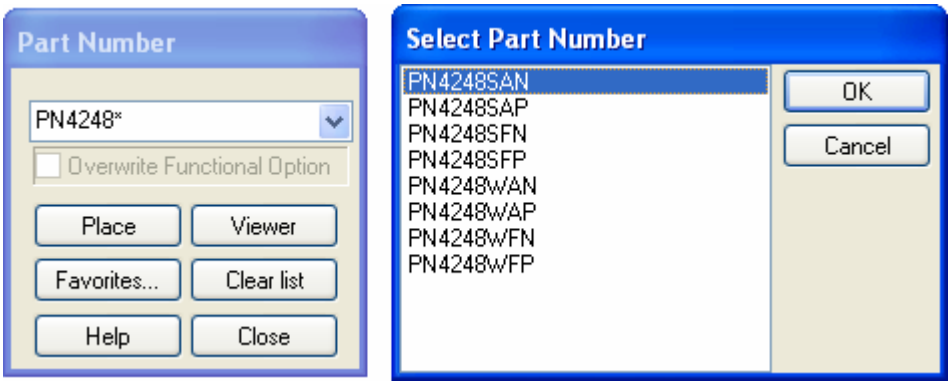


Figure 2-18

Tips and Tricks

If you do not know the complete part number and you need to search for a particular part, type as much of the part number as you know and add an asterisk to the end of the number. The Select Part Number dialog box will appear. Here you can choose the part you need from the list. Ex. Figure 2-18

Introduction

Option / Re-option Introduction

ProjectSymbols allows you to add options and re-option your parts inside your drawing. This feature allows you to have all of your specifications complete before you export your parts list into ProjectSpec to add pricing information. Optioning your parts in ProjectSymbols can increase your accuracy and productivity while adding important specification data to your drawings.

Option / Re-option Block

Option / Re-option Block

There are several different ways to option / re-option your blocks in Project-Symbols. If you want to option your blocks as you place them open your Catalog Reader and click the check box in the bottom left-hand corner of the window labeled, “Add Options To Symbol”.

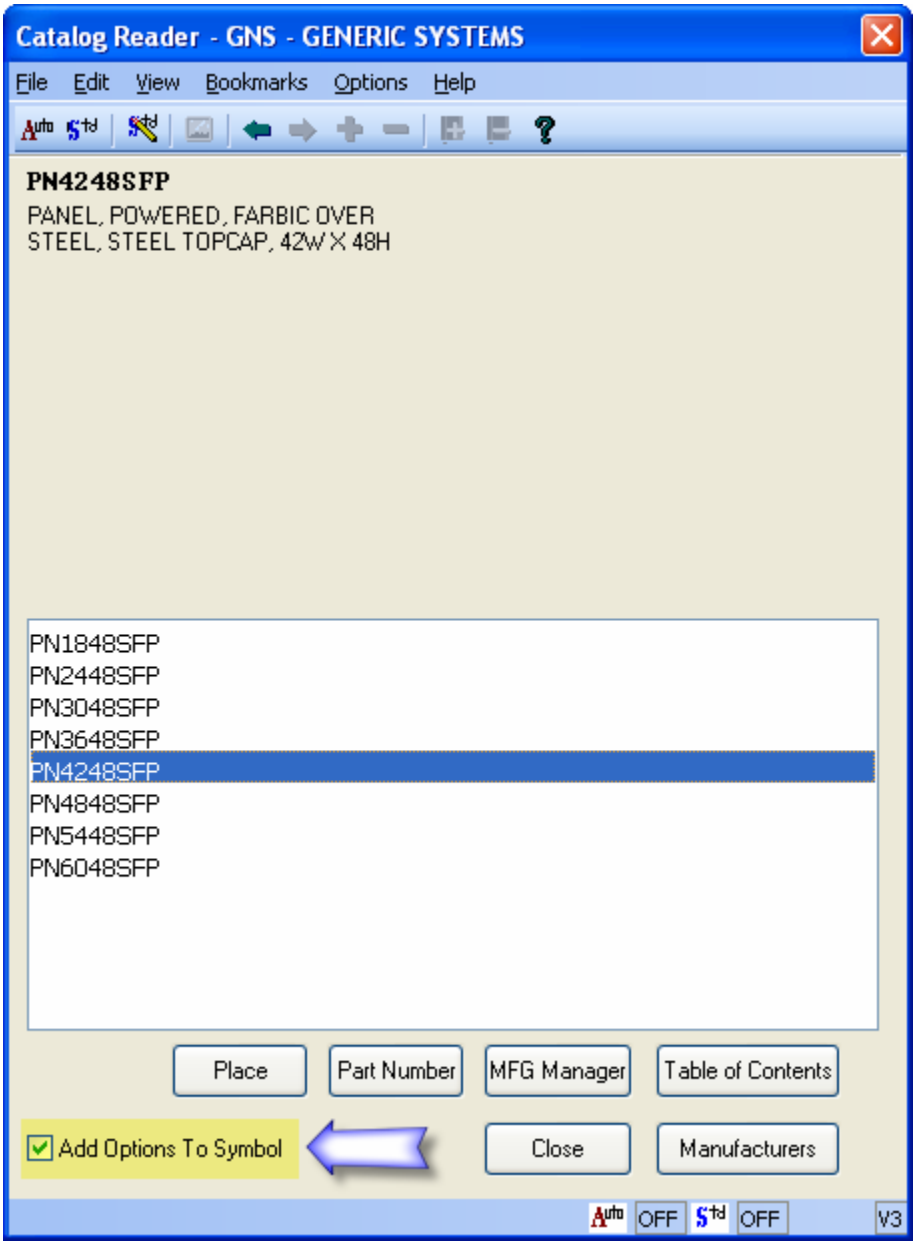


Figure 3-1

Option / Re-option Block

You can now double-click the part you wish to option and place. The option screen will appear to allow you to add options to the part before it is placed. Choose the appropriate options for your part by double clicking on them.

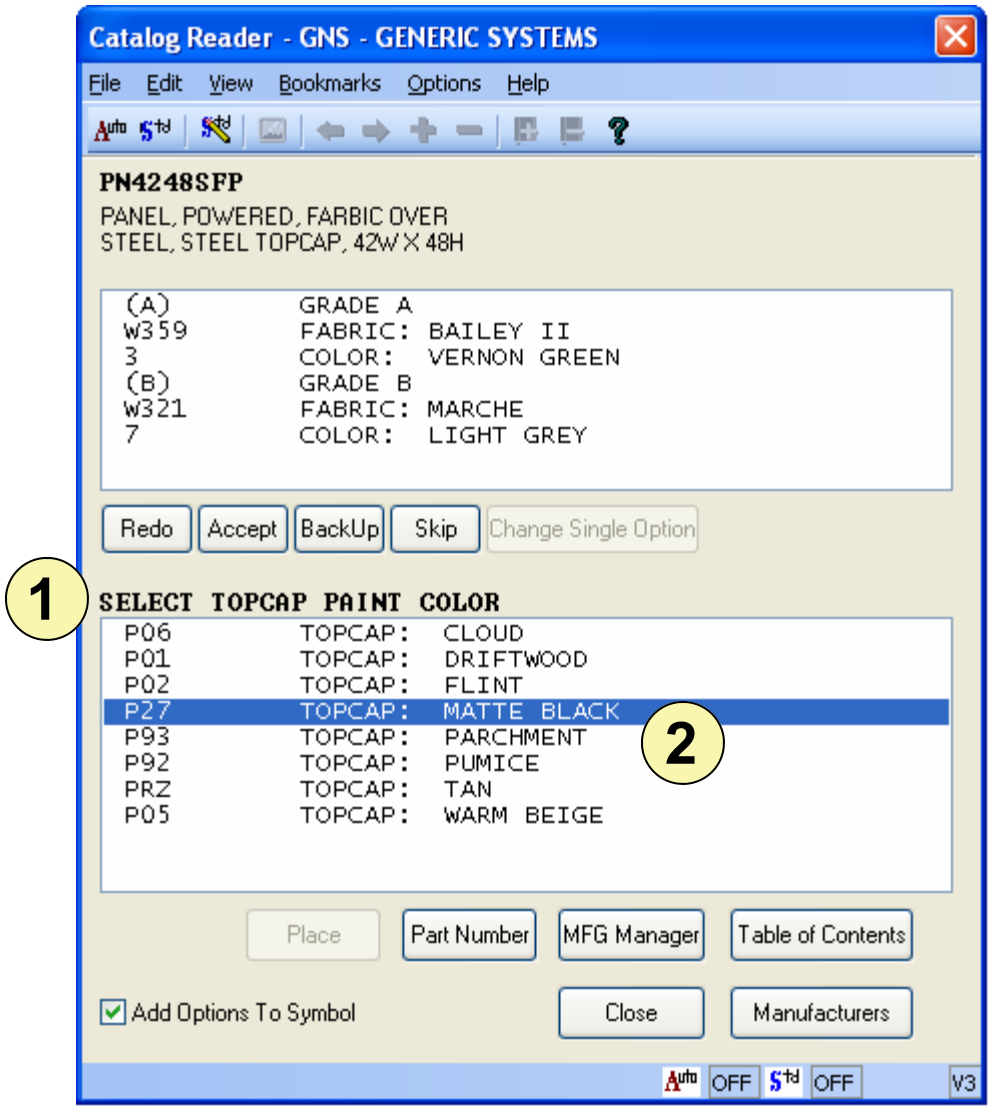


Figure 3-2

Figure 3-2
Label 1 - Description of sub-part that the option will be applied to.
Label 2 - Available options that can be selected.

Option / Re-option Block

After you choose all of the appropriate options for your part the description will read “No Further Options”. Click the “Accept” button to place the part into your drawing.

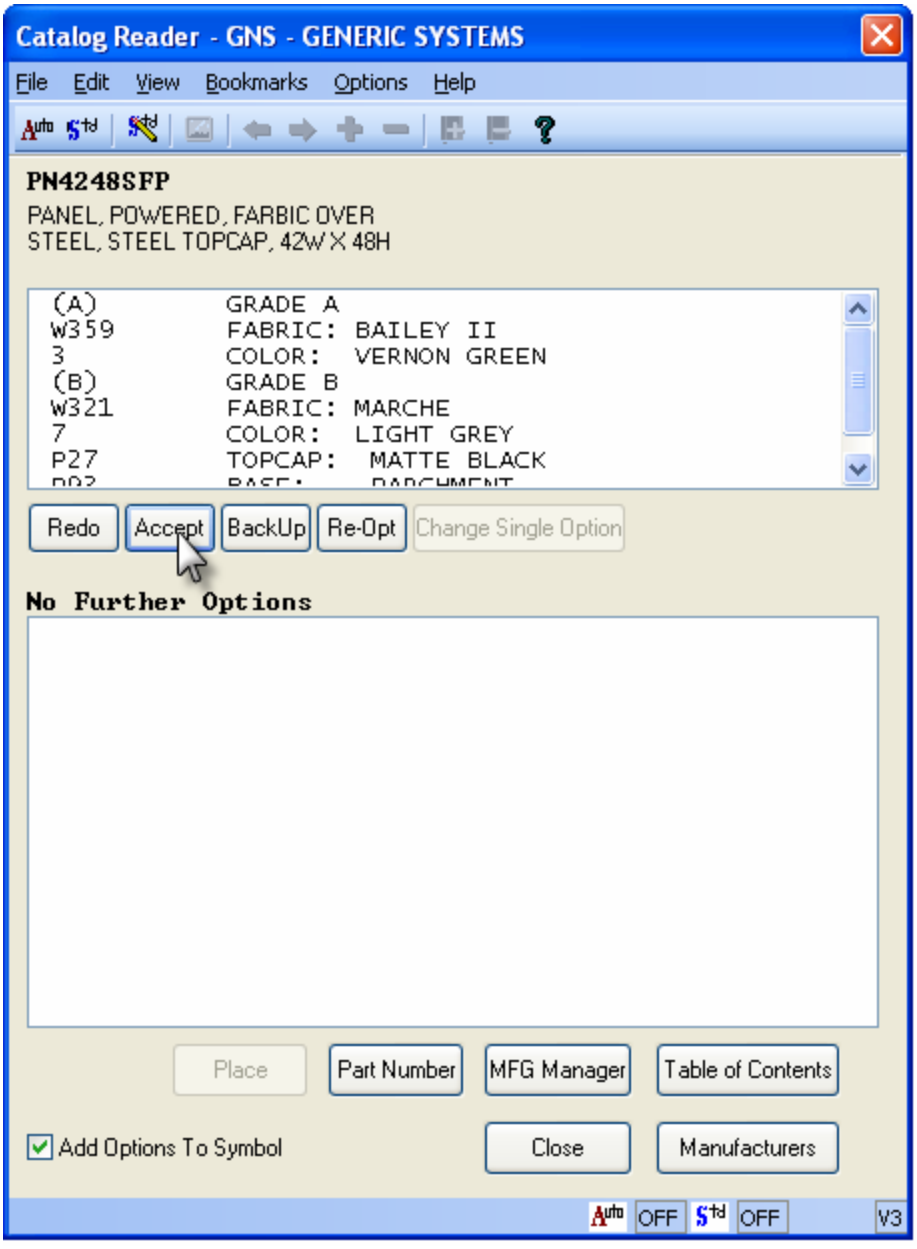


Figure 3-3

Option / Re-option Block

You do not have to option your parts as you place them. You can option them at any time using the “Option / Re-option Block” command. There are three different places in ProjectSymbols where you can find this command.

Figure 3-4

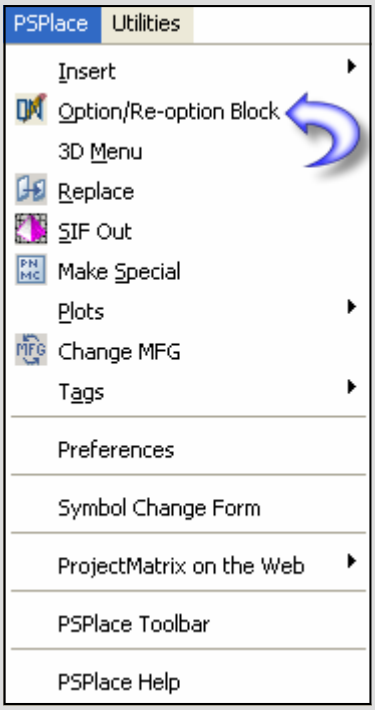


Figure 3-5

Figure 3-6

Figure 3-4
From the PSPlace pulldown menu select “Option / Re-option Block”

Figure 3-5
Click the “Option / Re-option Block” icon located on the PSPlace toolbar.

Figure 3-6
Type PN in the command line and press Enter.

Option / Re-option Block

To option or re-option a block after it has already been placed, run the "Option / Re-option Block" command. The command will ask you to select the block you wish to option.

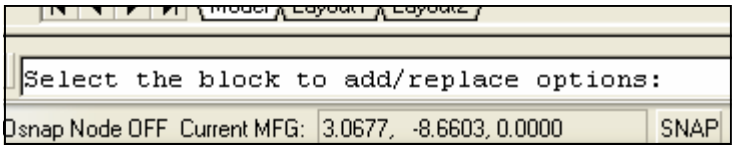


Figure 3-7

The Catalog Reader window will appear with the options screen selected. Choose the appropriate options to complete the specification of the selected block.

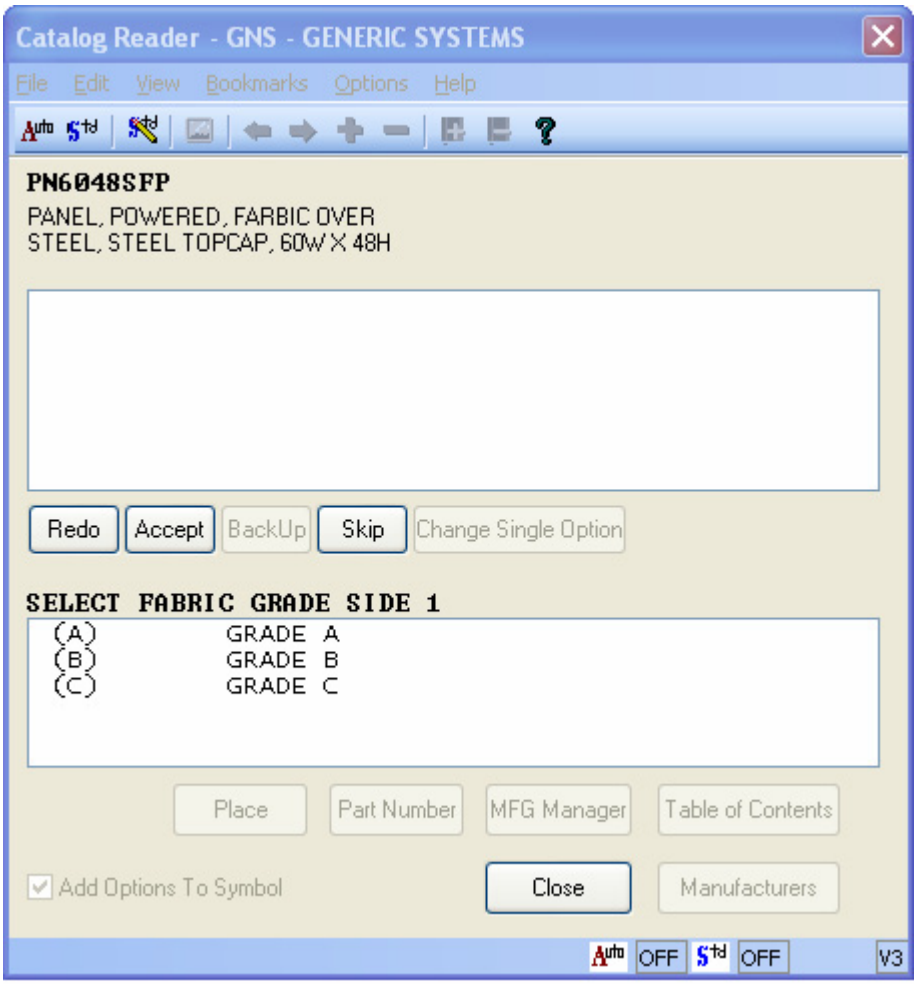


Figure 3-8

Introduction

Converting Symbols to 3D Introduction

Converting symbols to 3D has been made very simple in ProjectSymbols. This quick and easy utility in ProjectSymbols can make great presentation drawings to show to clients and provides great detail plans for installers.

Converting Symbols to 3D

The 2D to 3D Conversion command can be found in three different places in ProjectSymbols.

Figure 4-1

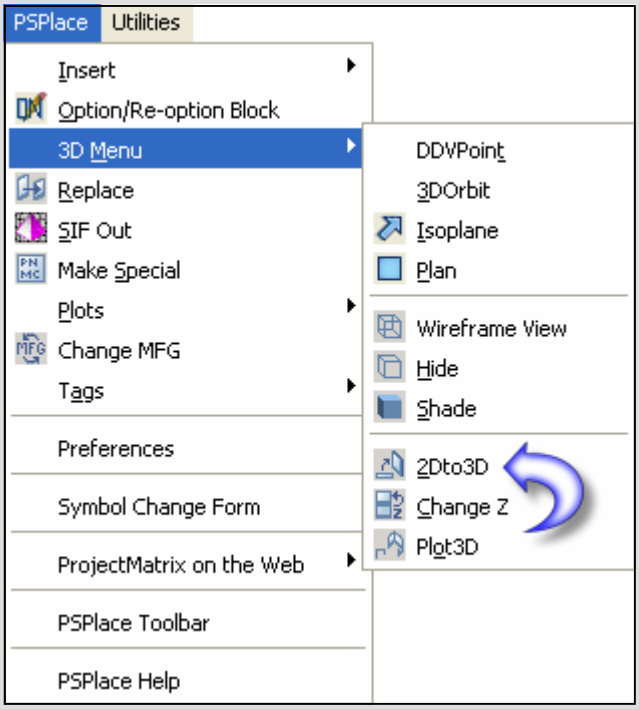


Figure 4-2

Figure 4-3

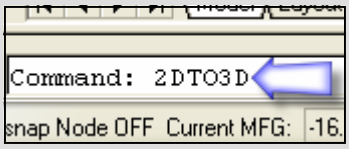


Figure 4-1
From the PSPlace pulldown menu select “3D Menu” → ”2Dto3D”

Figure 4-2
Click the “2Dto3D” icon located on the PSPlace toolbar.

Figure 4-3
Type 2DTO3D in the command line and press Enter.

Converting Symbols to 3D

The 2D to 3D command is fairly straight forward. Once the command is started you will be asked if you want to make a copy of the drawing before converting.

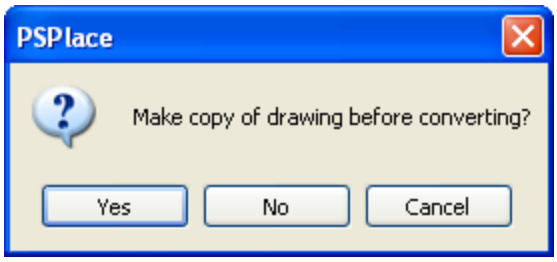
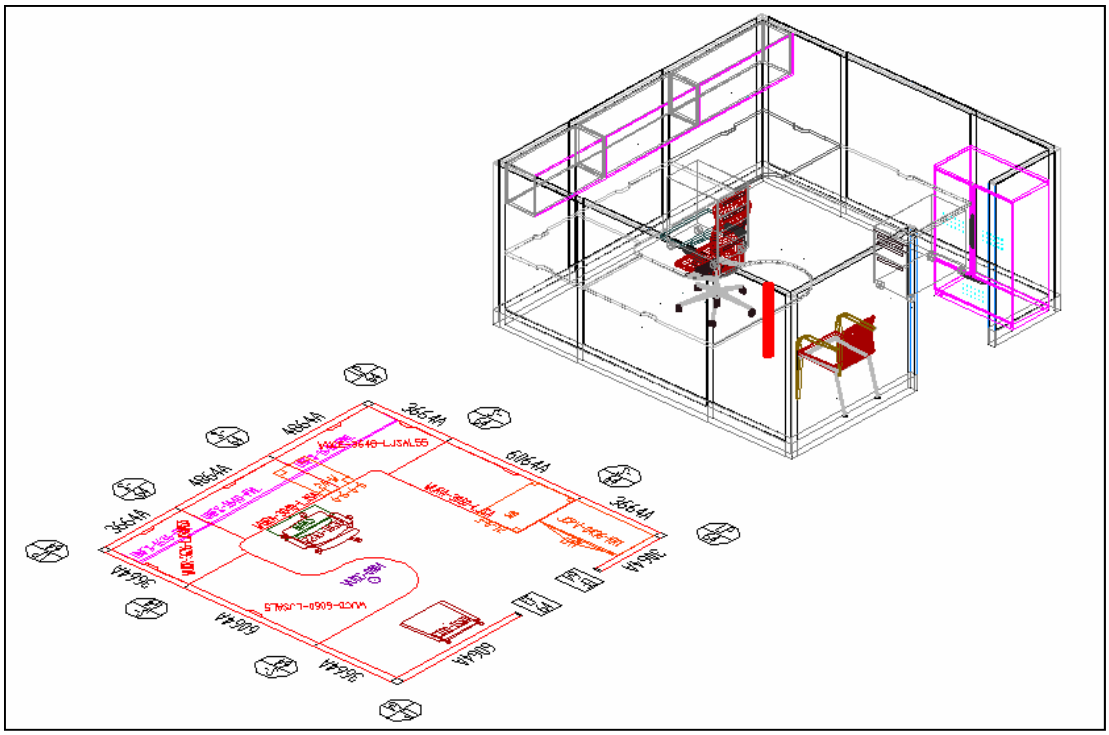


Figure 4-4

If you choose “No” the symbols that you select will be converted to 3D.

If you choose “Yes” the command will prompt you to select the symbols that you wish to convert. Then it will make a copy of the symbols and convert them to 3D in a location that you specify.



Change Z

Change Z - Moving Symbols Vertically

Sometimes symbols need to be moved up or down in the Z-axis. For instance, If you are building a panel system the tiles will most likely come in on the floor. The best way to approach moving them up in the Z-axis is to use the “Change Z” command. This command can be found in three places in ProjectSymbols.

Figure 4-5

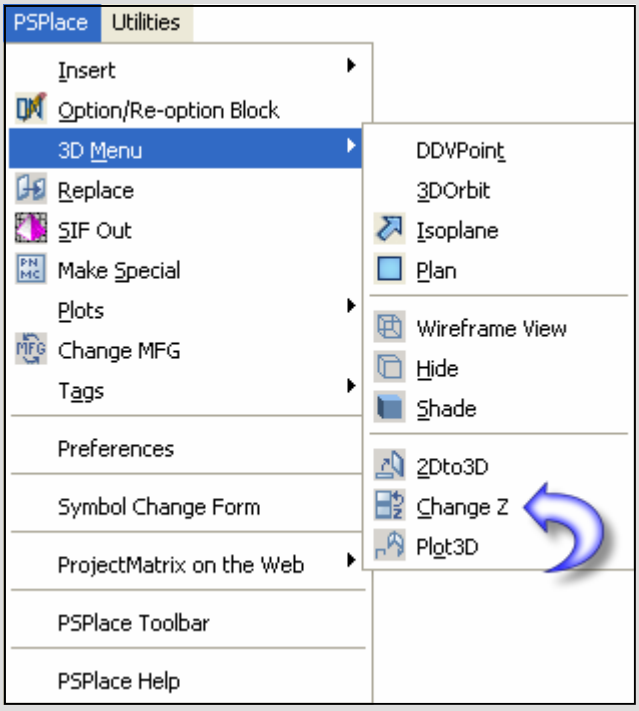


Figure 4-6

Figure 4-7

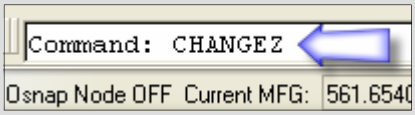


Figure 4-5
From the PSPlace pulldown menu select “3D Menu” → “Change Z”

Figure 4-6
Click the “Change Z” icon located on the PSPlace toolbar.

Figure 4-7
Type CHANGEZ in the command line and press Enter.

Change Z

When the Change Z command is executed the program will as you to select your objects.

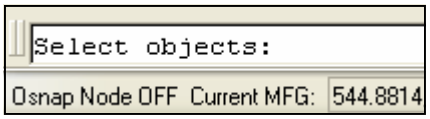


Figure 4-8

Select the symbols that need to be moved in the Z-axis and press Enter. The Z Offset dialog box will appear.

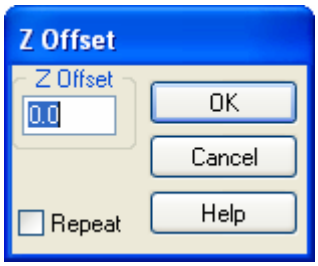


Figure 4-8

If you need to move the symbol(s) up type the amount in inches in the Z Offset dialog box. Ex. 6.0

If you need to move the symbol(s) down type the amount in negative inches in the Z Offset dialog box. Ex. –6.0

Checking the “Repeat” box will restart the “Change Z” command after the changes have been made.

Tips and Tricks

When using the “Change Z” command it is recommended that you change the Z height of your 2D symbols. This will cause the symbols to be placed at the correct height when you convert your symbols to 3D. It is much easier to make changes to the 2D symbols once than to have to readjust the 3D symbols each time a change is made in the drawing.

Modifying 3D Views

Modifying 3D Views

There are several tools inside of ProjectSymbols to allow you to modify the look of your 3D symbols. They can be found in the PSPlace pulldown menu under “3D Menu”, in the PSPlace toolbar, or they car be typed in the command prompt in AutoCAD.

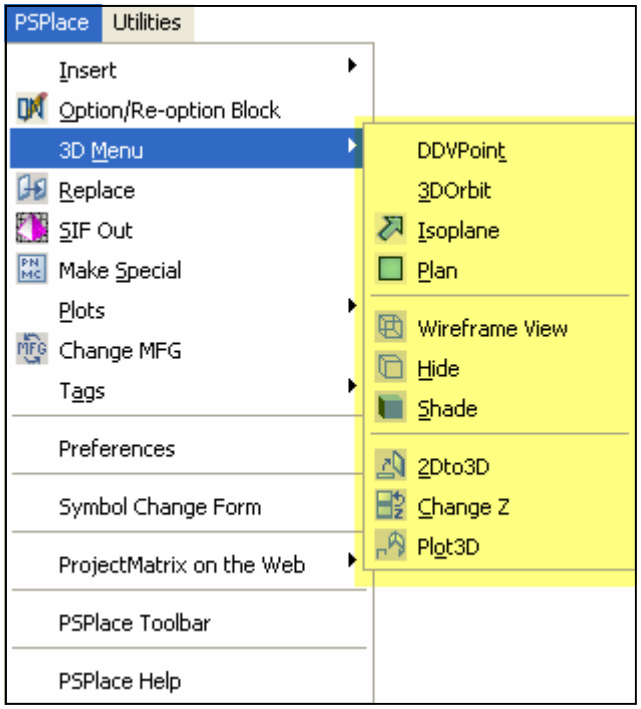


Figure 4-9

Moving Between 2D and 3D Views

Moving Between 2D and 3D Views

When working with 3D symbols in a drawing it is important to understand how to move between 2D and various 3D views.

DDVPoint - This command can be found in the “PSPlace” pulldown menu or it can be executed by typing DDVPOINT in the command line.

Figure 4-10

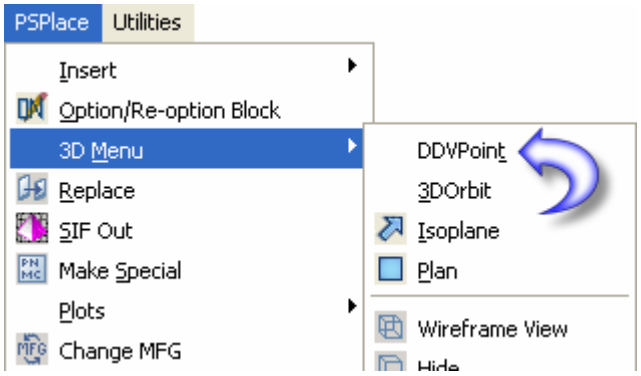


Figure 4-11

DDVPoint allows you to set the viewing angle relative to the World Coordinate System (WCS) or a User Coordinate System (UCS).

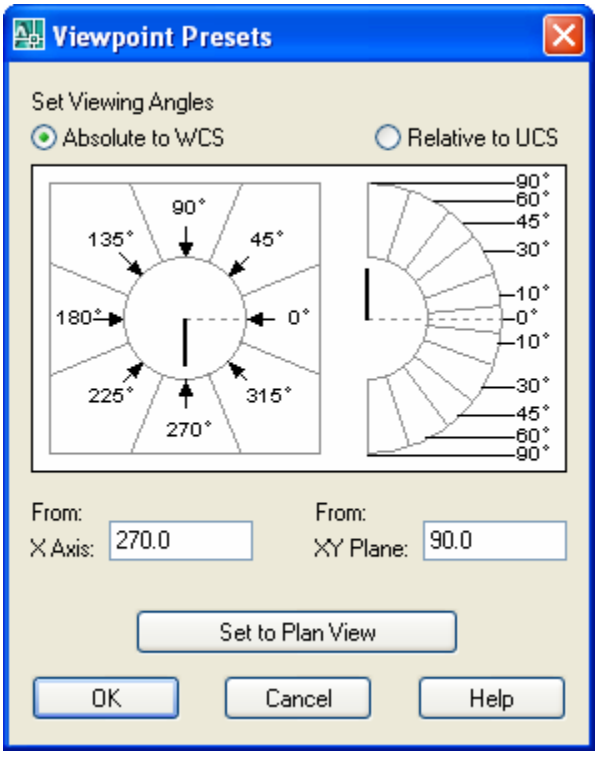


Figure 4-12

Moving Between 2D and 3D Views

3D Orbit - This command can be found in the “PSPlace” pulldown menu or it can be executed by typing 3DFORBIT in the command line.

Figure 4-13

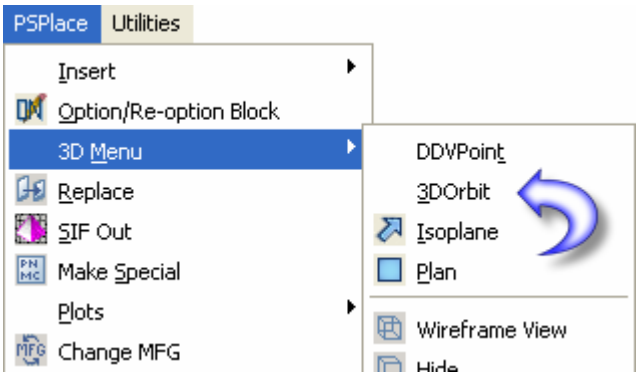
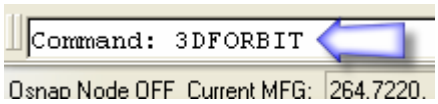


Figure 4-14



3DORBIT activates a 3D Free Orbit view in the current viewport. You can click and drag in this view to rotate the view to a desired location.

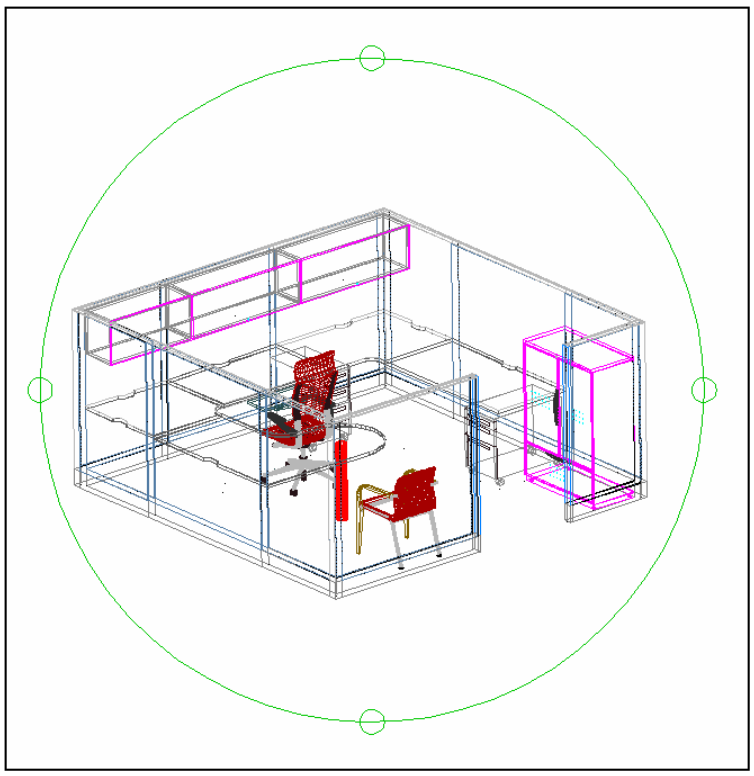
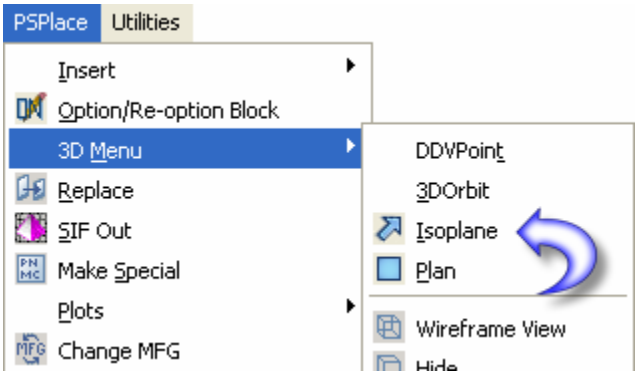


Figure 4-15

Moving Between 2D and 3D Views

Isoplane - This command can be found in the “PSPlace” pulldown menu.

Figure 4-16



Isoplane rotates the drawing view to a Southwest Isometric view.

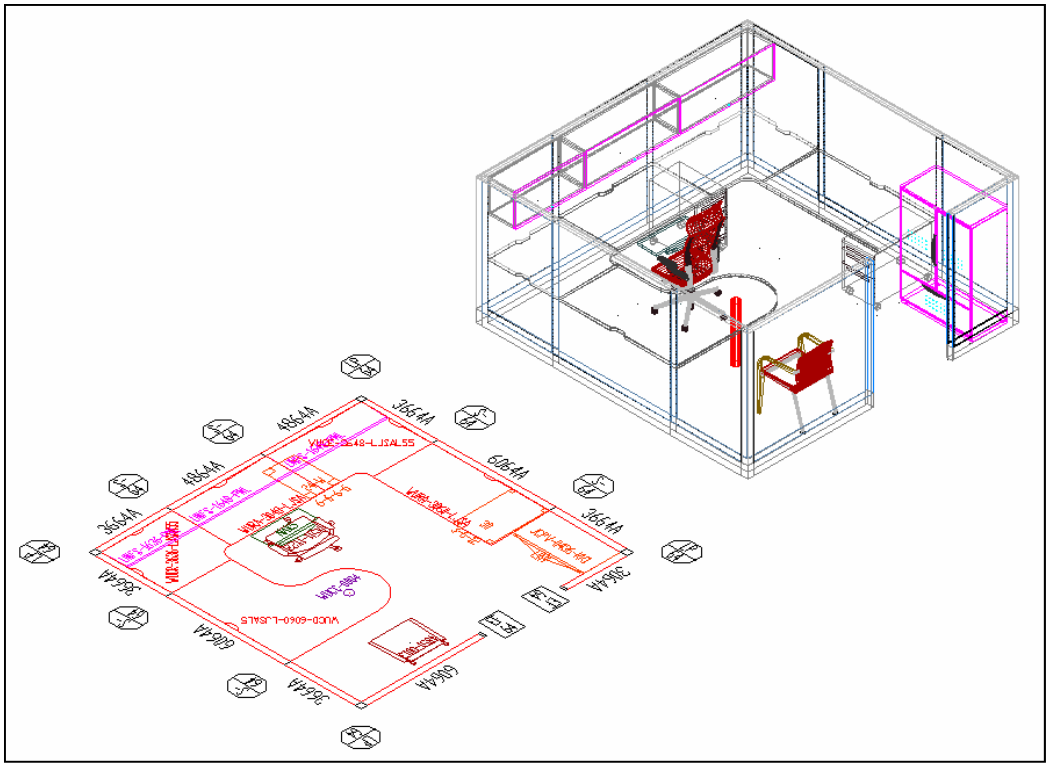


Figure 4-17

Moving Between 2D and 3D Views

Plan - This command can be found in the “PSPlace” pulldown menu or it can be executed by typing PLAN in the command line.

Figure 4-18

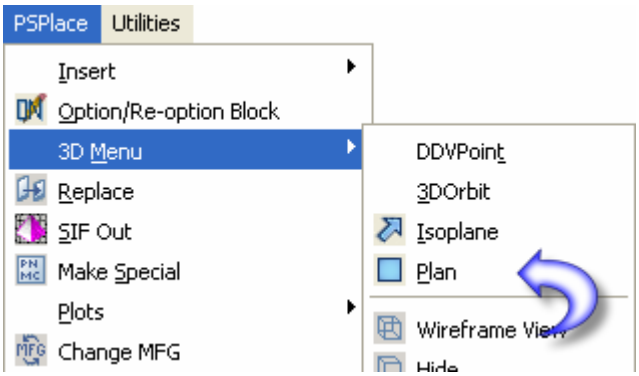
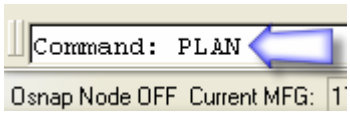


Figure 4-19



The “Plan” command will revert the drawing to an overhead plan view.

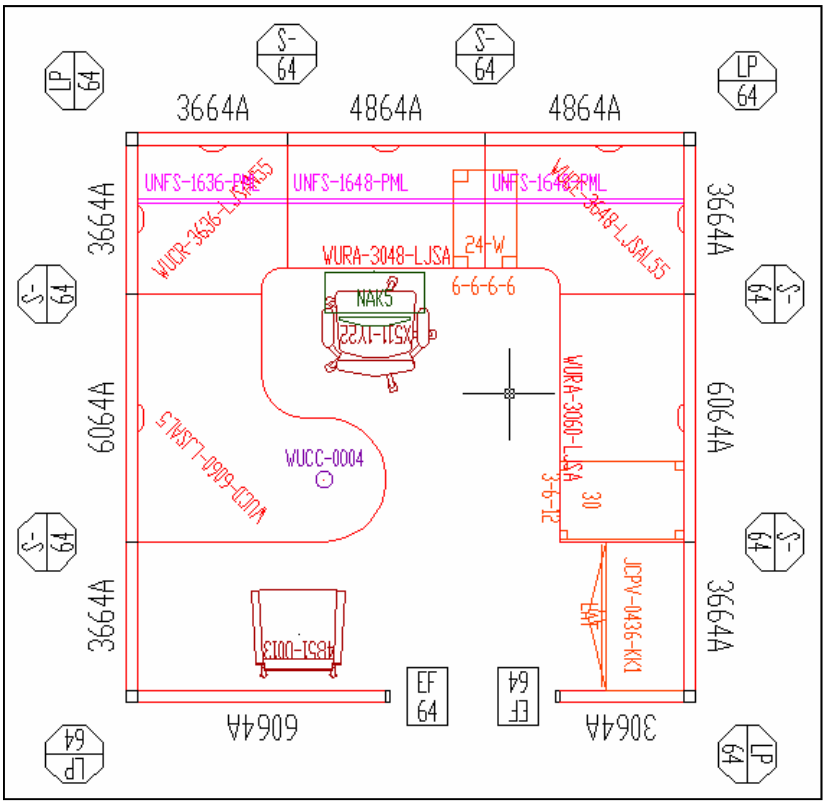


Figure 4-20

Hide / Shade 3D Symbols

Hide - Displays the drawing in hidden line mode.

Shade - Displays the drawing in shade mode.

There are three different places in ProjectSymbols where you can find these commands.

Figure 4-21

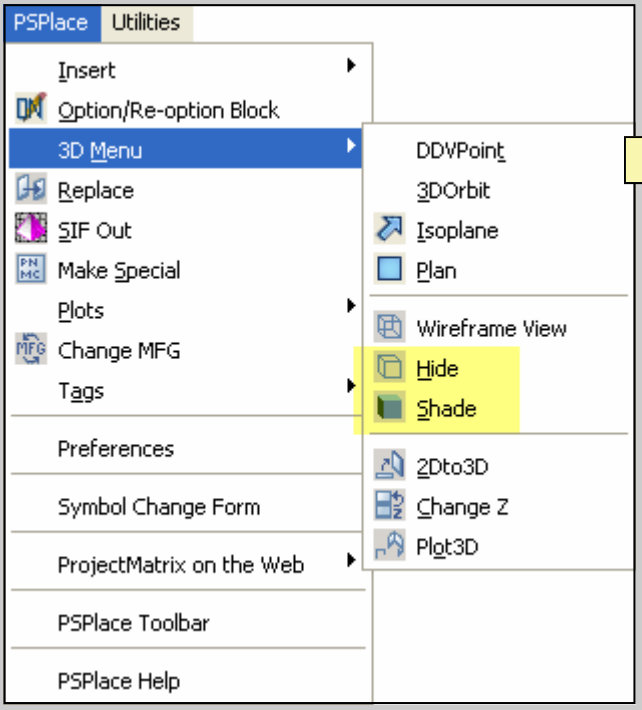


Figure 4-22

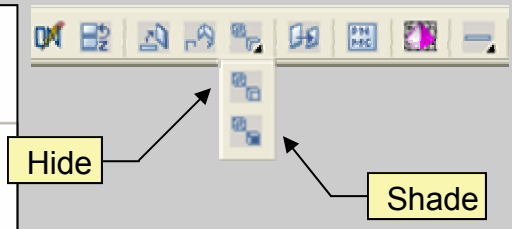


Figure 4-23

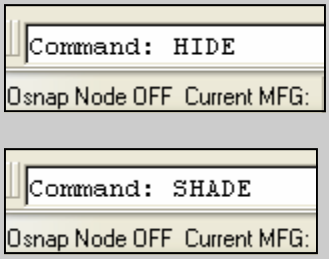


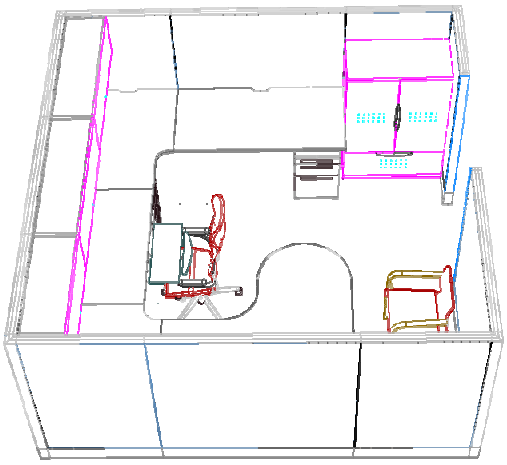
Figure 4-21
From the PSPlace pulldown menu select “3D Menu”→ “Hide” or “Shade”

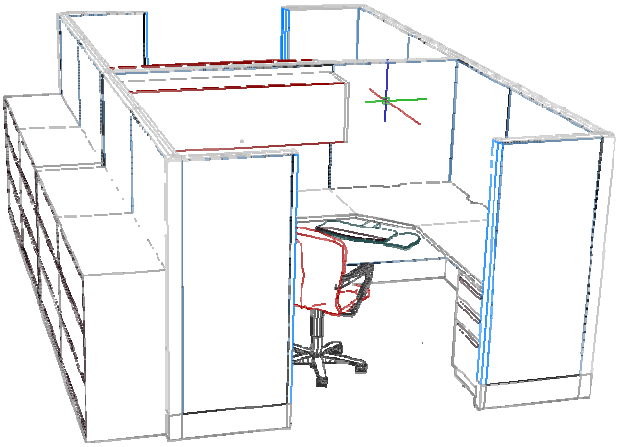
Figure 4-22
Click the “Hide” or “Shade” icon located on the PSPlace toolbar.

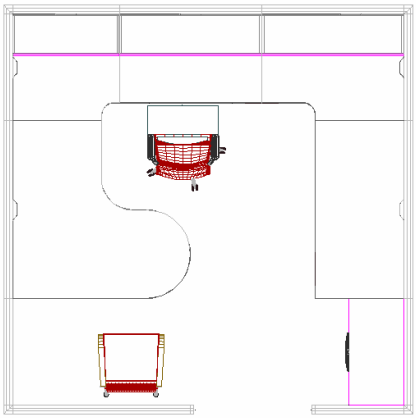
Figure 4-23
Type HIDE or SHADE in the command line and press Enter.

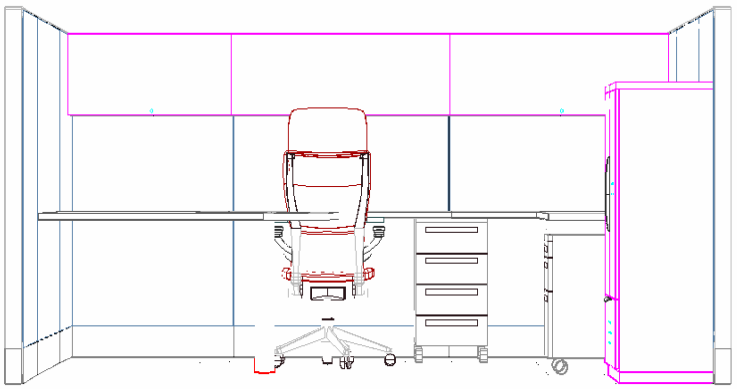
Hide / Shade 3D Symbols

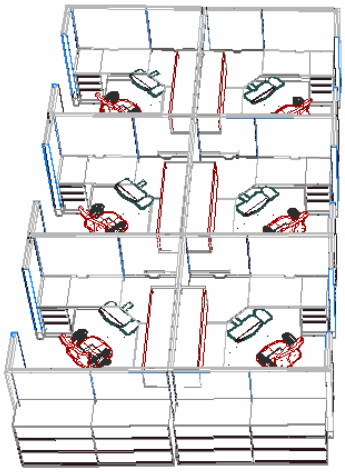
Examples of the “Hide” command.

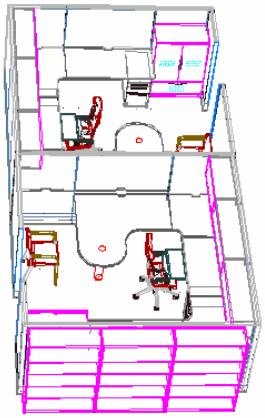


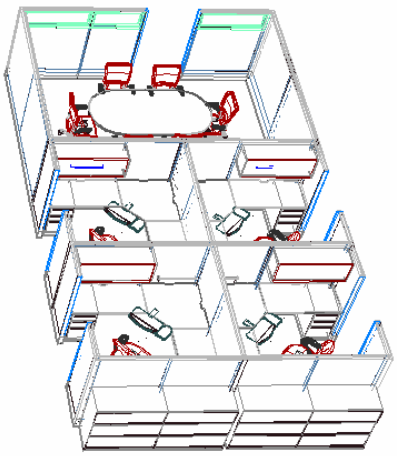






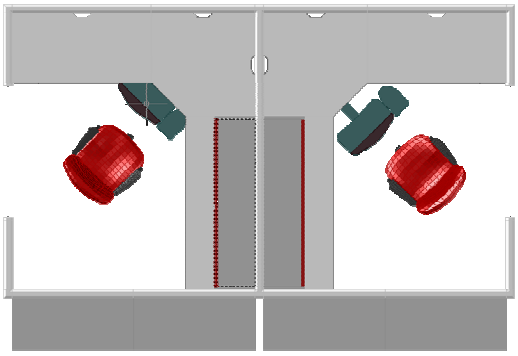


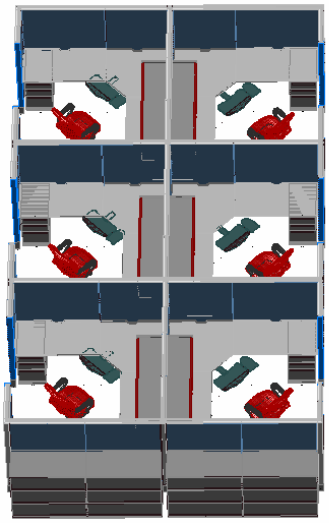


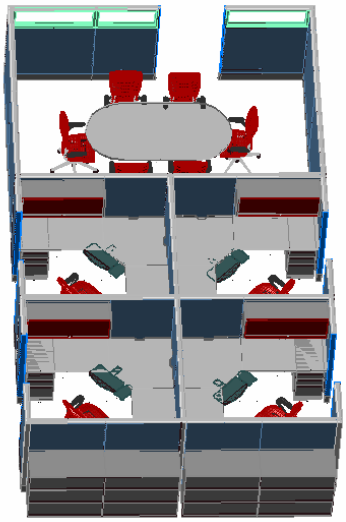


Hide / Shade 3D Symbols

Examples of the “Shade” command.







Plot 3D

Plot 3D

The “Plot 3D” command allows you to create a “block” of symbols in 3D view and insert it into a plan view. This command can be found in three places in ProjectSymbols.

Figure 4-24

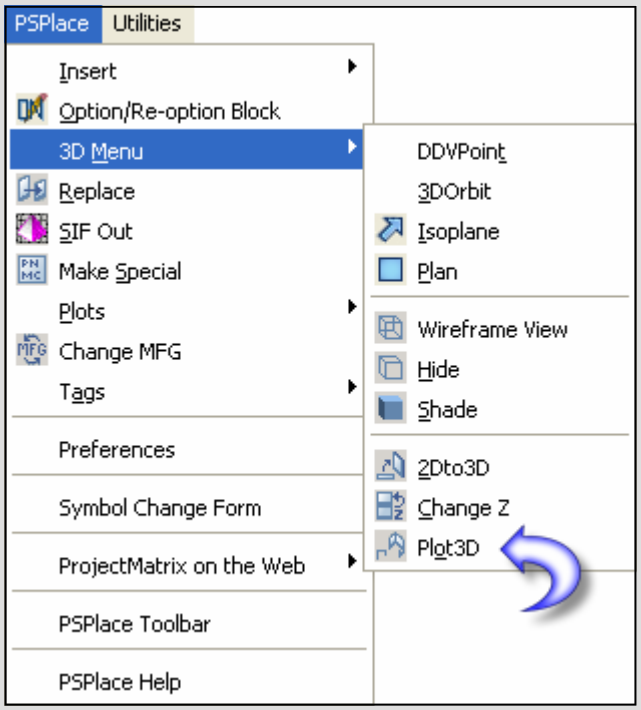


Figure 4-25

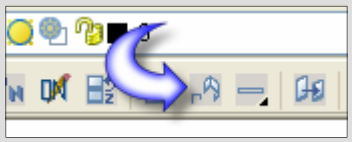


Figure 4-26

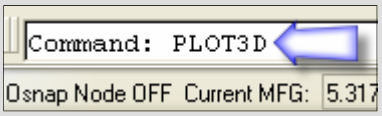


Figure 4-24
From the PSPlace pulldown menu select “3D Menu” → “Plot3D”

Figure 4-25
Click the “Plot 3D” icon located on the PSPlace toolbar.

Figure 4-26
Type PLOT3D in the command line and press Enter.

Plot 3D

Choose a 3D view that suits your needs for your 3D Plot and run the 3D Plot command *Figure 4-27*. After the “Plot 3D” command is executed the Plot 3D dialog box will appear *Figure 4-28*. In this dialog box you will type in a name for your 3D Group. It is also important to make sure that the “Make a copy of the 3D symbols” checkbox is selected. This option will create a copy of the 3D group of symbols, so that you can place them into your plan view while leaving the originals unaffected.

Figure 4-27

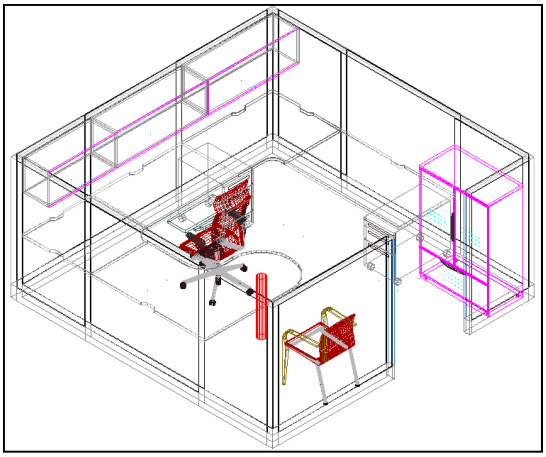
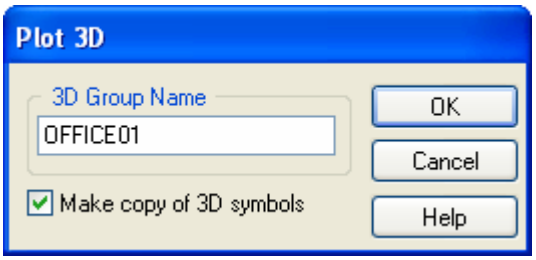


Figure 4-28



Once you have named your 3D group and selected your settings, click the OK button. The command line will prompt you to “Select objects” *Figure 4-29*. Choose the group of symbols you wish to plot in 3D and “right-click” or press the “Enter” key on your keyboard. The command line will now ask you to “Select an insertion point to the items” *Figure 4-30*. Choose any point, preferably near the middle of the group, and click your left mouse button. Your drawing will now revert back to your plan view and your 3D group of symbols will be attached to your cursor *Figure 4-31*. Simply choose the location that you wish to place the 3D group and click to complete the operation *Figure 4-32*.

Plot 3D

Figure 4-29

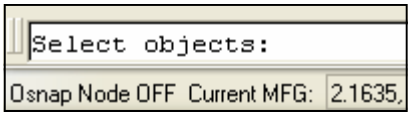


Figure 4-30

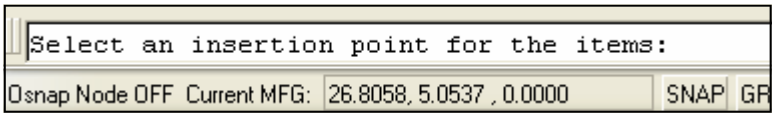


Figure 4-31

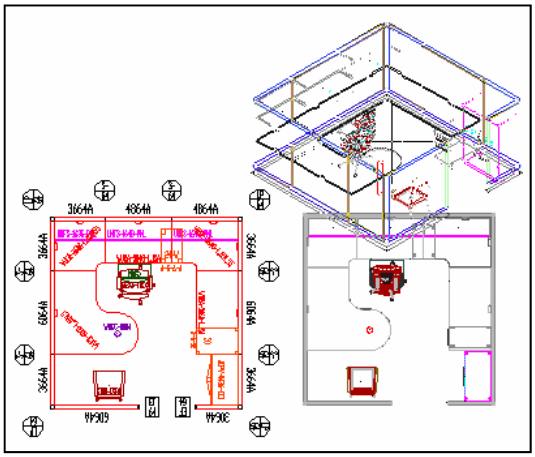
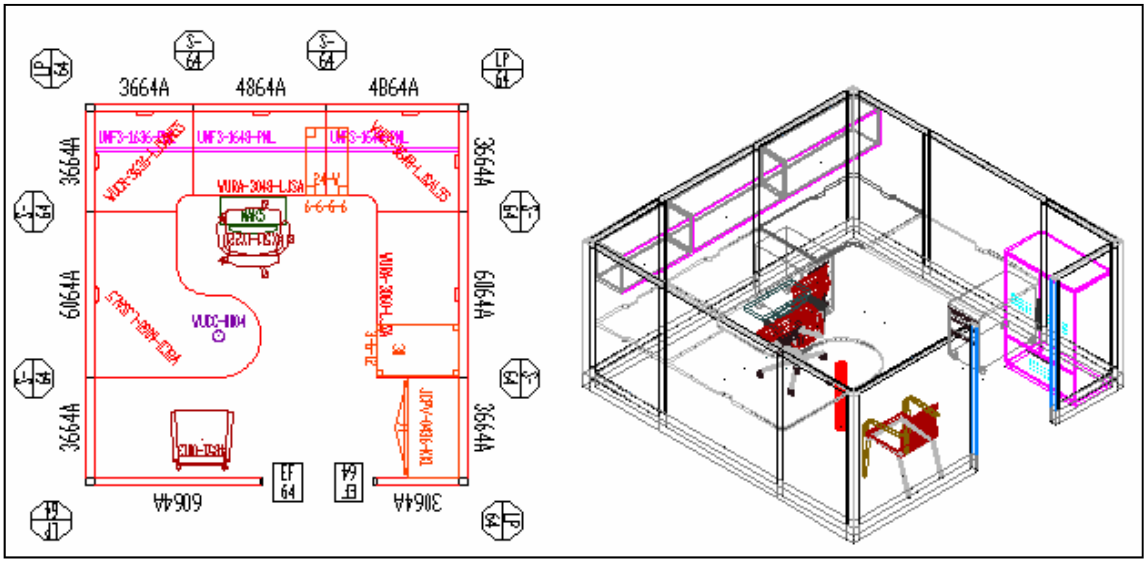


Figure 4-32



Introduction

Install Text Plots Introduction

Install text plots are designed to improve the clarity of Installation drawings. By creating a set of drawings to display all the information we can control where the text and graphics are placed. Using a wide range of layer enables us to display only panels or just the components.

Install Text Plots give you the ability to turn off and on certain symbol layers to generate clear instructions for an installer. You can create either a texted or a non-texted plan by pressing one button. In texted, meaning with text, you can make a panel plan, a component plan, an electrical plan, or you can do an all-texted plan. In non-texted, meaning no text, you can do the same as texted plus we have a general plan.

Install Text Plots

The “Install Text Plots” command can be found in two places in ProjectSymbols.

Figure 5-1

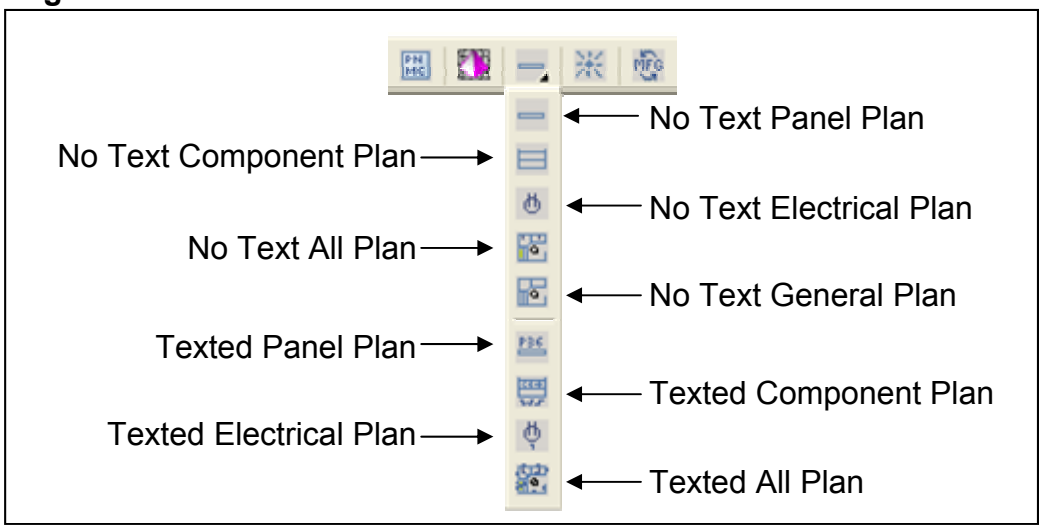


Figure 5-2

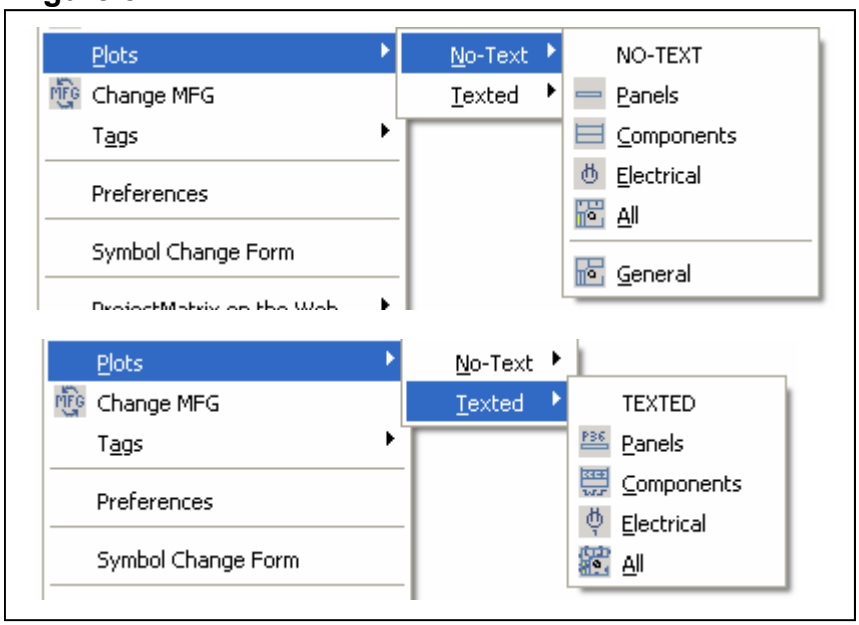


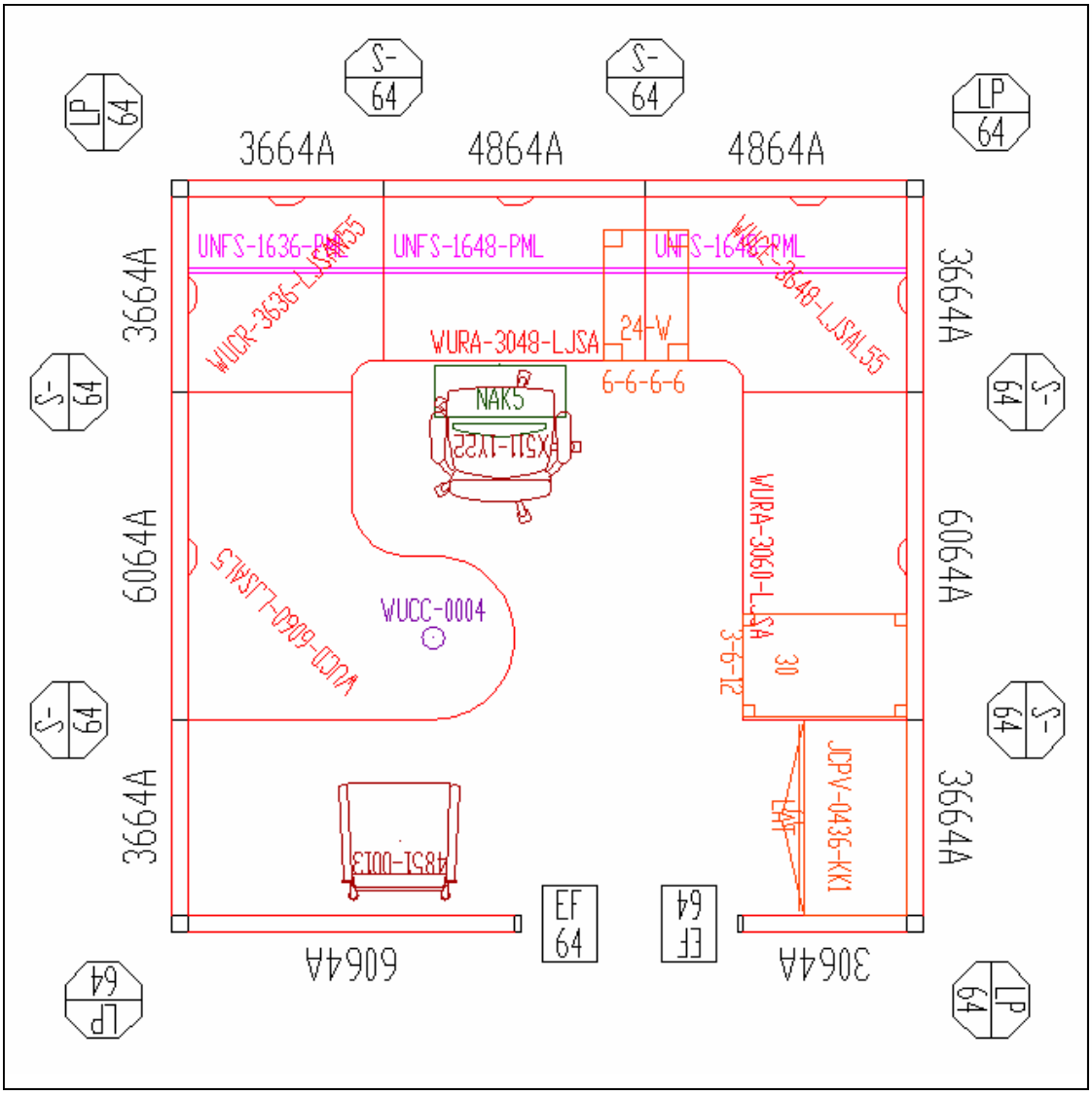
Figure 5-1
Click and hold on the “Install Text Plots” icon on the PSPlace toolbar. The various “Install Text Plots” icons will appear below the original icon. Choose the appropriate icon selection for your drawing.

Figure 5-2
From the PSPlace pulldown menu select “Plots” → “No-Text” or “Texted”

Install Text Plots

Install Text Plots : Examples

Figure 5-3 : Original Layout



Install Text Plots

Install Text Plots : Examples

Figure 5-4

Texted Panel Plan Layout

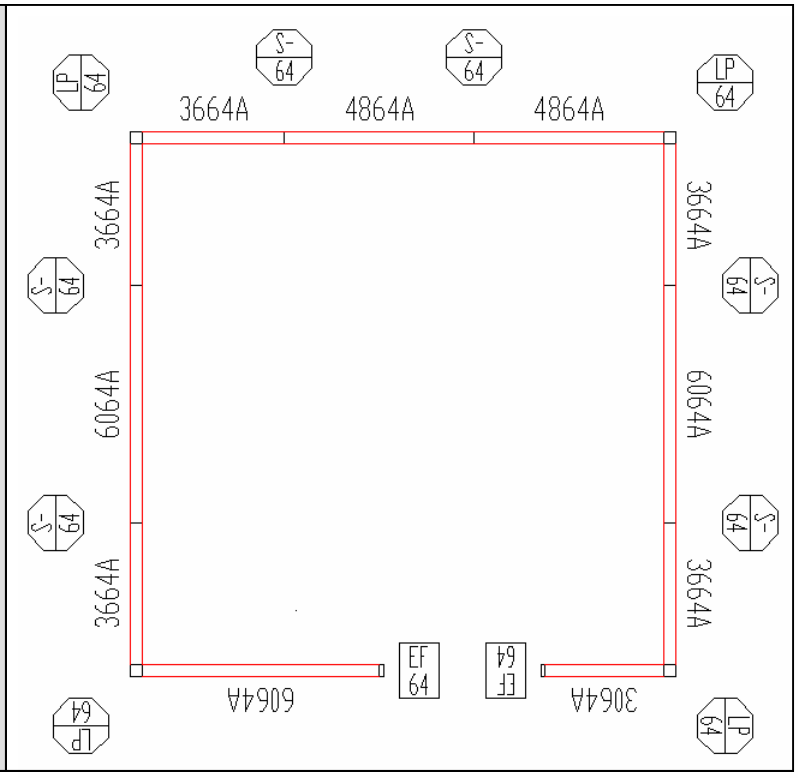
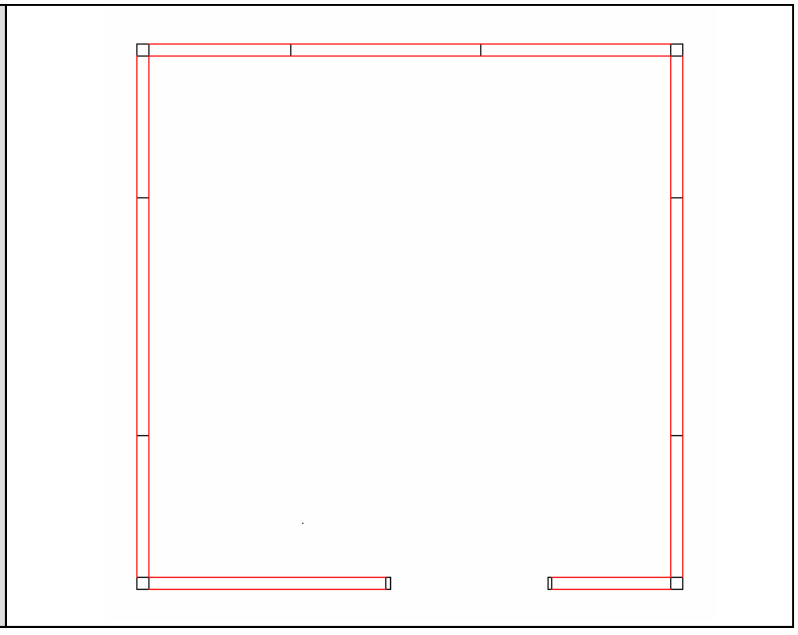


Figure 5-5

Non-Texted Panel Plan Layout



Install Text Plots

Install Text Plots : Examples

Figure 5-5

Texted Component Plan Layout

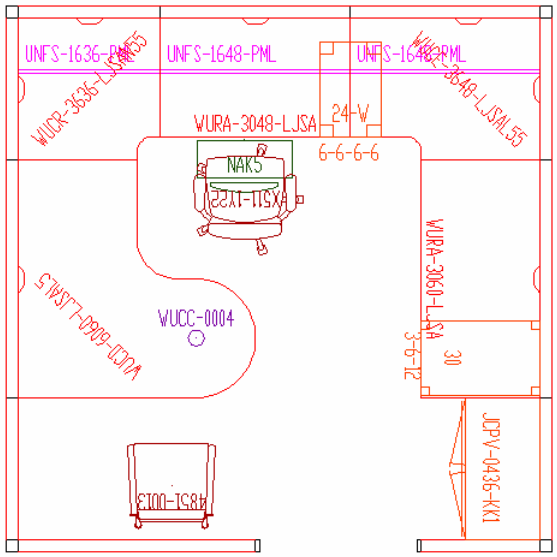
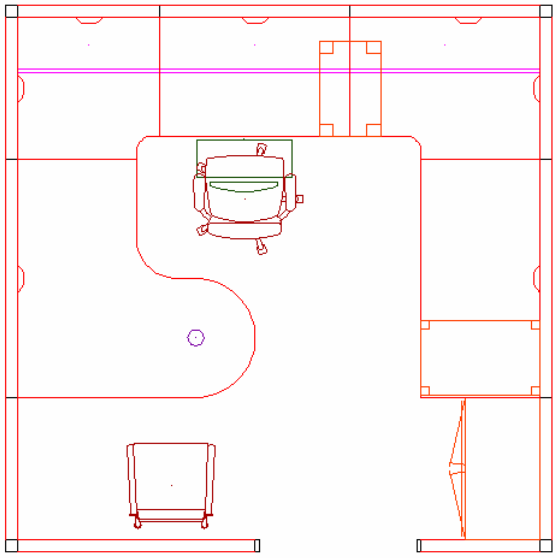
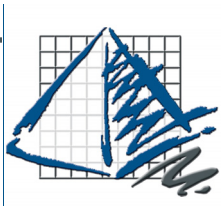


Figure 5-6

Non-Texted Component Plan Layout





Introduction

Make Special, Set Tags, and Replace Command Introduction

These tools are used to modify or add additional data to your drawings. By adding this additional data to your drawings you can better organize your output and make sure that any symbols that is needed is in the drawing. These commands are very powerful and can save you limitless amounts of time and effort.

Make Special

Make Special

In some cases you may need to create a custom symbol. To create your own custom symbol you can start from three places, one is to use an existing symbol that is the right size and shape that you may need and change the existing attributes. The second is to place a symbol and explode it then modify its existing attributes. The third is to start from scratch and create your own symbol. This command can be found in three places in ProjectSymbols.

Figure 6-1

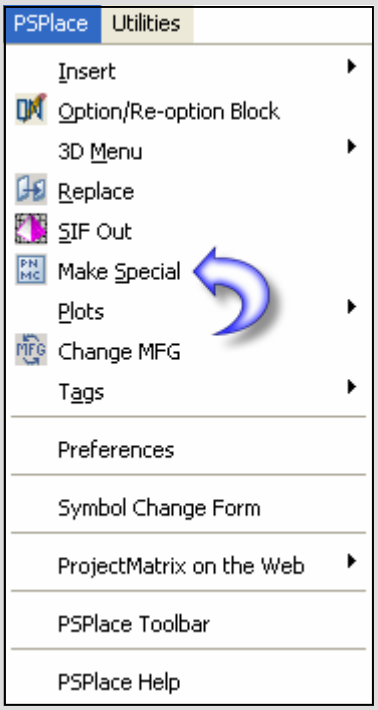


Figure 6-2

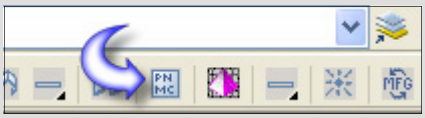


Figure 6-3

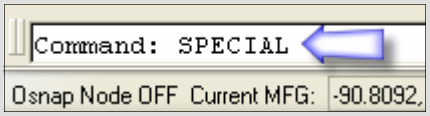


Figure 6-1
From the PSPlace pulldown menu select “Make Special”

Figure 6-2
Click the “Make Special” icon located on the PSPlace toolbar.

Figure 6-3
Type SPECIAL in the command line and press Enter.

Make Special

Make Special Dialog Box

Special - Click this radio button when you are making a custom part that is not part of the standard product line. A special by definition is one typical.

Assembly - Click this radio button when you are making grouping of parts that you will use frequently.

Part # - Type in your desired part number . When creating an assembly, you do not have to add the .SIF extension to the part number, if you have SifOut check ON in the lower left of this window. The program will automatically append the SIF extension to the part number so the takeoff is correct in ProjectSpec.

Description line 1 - Type your description. Limit of 30 characters.

Description line 2 - Type your description. Limit of 30 characters.

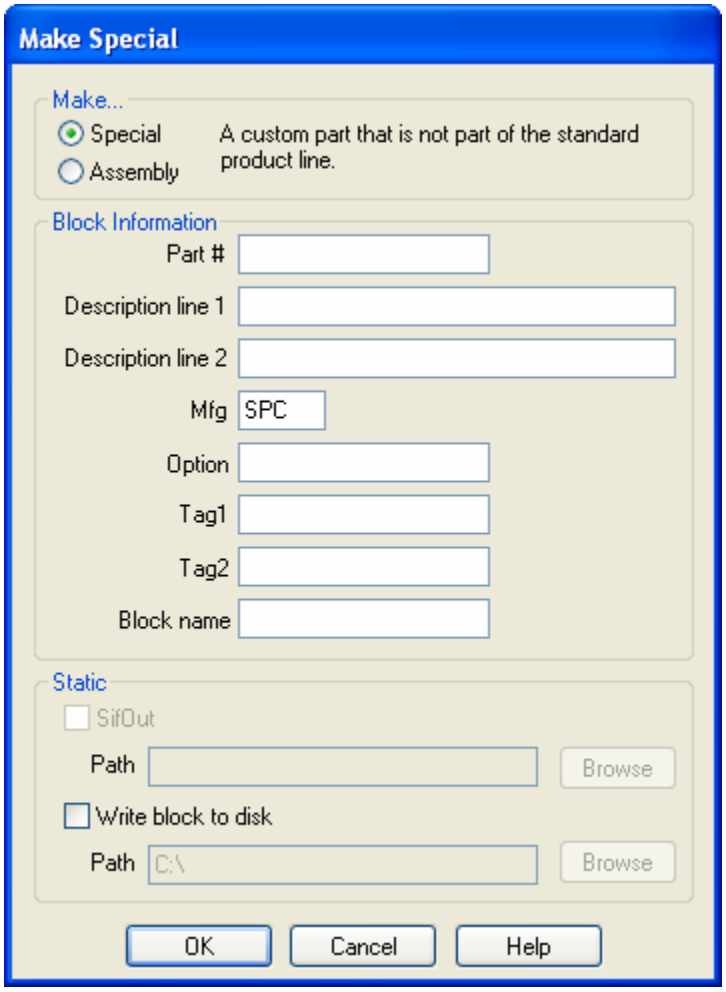
Mfg – Typically it is the 3 character code you see in the Select Manufacturer Window. Otherwise enter a code of SPC to indicate it is a special. *This is grayed out for assembly.*

Option - Enter the desired option code. *This is grayed out for assembly,*

Tag1 - Enter the desired TAG1 (8 char max.) *This is grayed out for assembly.*

Tag2 - Enter the desired TAG2 (20 char max.) *This is grayed out for assembly.*

Figure 3-4



Make Special

Block Name – Symbol name for future inserts. It is recommended NOT to use hyphens or dashes.

SIF Out checkbox - This option is available for assembly only. It is recommended you leave this checked. If you do not SIF out, the program will turn all of your part numbers into one big part number. When you try to pull it up in ProjectSpec, it would be unable to break out the part numbers that make up the assembly. If you had checked this, you would see all the parts in the assembly broken out in ProjectSpec.

Path text box - This is the place on your hard drive where the SIF file is saved.

Write block to disk checkbox - If you choose to write this block to disk, this ensures the block is available to other drawings you may create. (In AutoCAD it is known as a WBLOCK.) If you do not check the box, then the block is saved within the current drawing and only available to the current drawing. (In AutoCAD it is known as a BLOCK.)

Path text box - this is the place on your hard drive where the WBLOCK is saved.

Set Tags

Setting Tags

There is additional information that at times you may need to add to symbols. This could be a location such as a room name or it could be a phase in a multi level install. To do this we use tags. Tags can be used in ProjectSpec to sort or organize the symbol information. There are two tags in ProjectSymbols and ProjectSpec named Tag1 and Tag2. Tag 1 is an 8 character field and tag 2 is an 20 character field. These two fields can be setup inside the AutoCAD drawing on the symbols.

To set tags in AutoCAD you can either set them before you place the symbol or after. To set the tag before you use the command “Set Tag1 & Tag2”. Once this is set every symbol that you place after setting will have the set value. To set tags after symbols have already been placed you can use “Tag by selection”. This will allow you to window or pick which symbols you wish to tag.

Set Tags

The “Set Tag1 & Tag2” command can be found in three different places in ProjectSymbols.

Figure 6-5

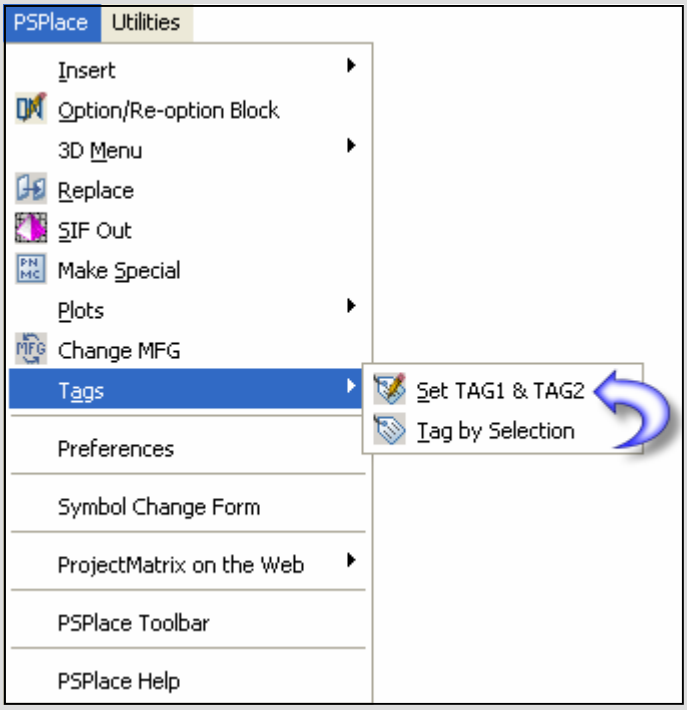


Figure 6-6

Figure 6-7

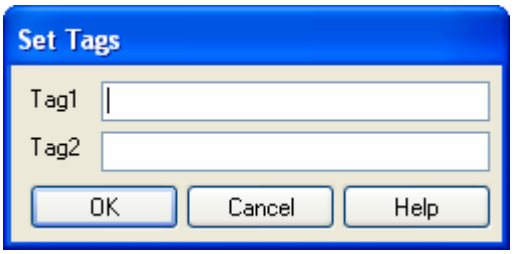
Figure 6-5
From the PSPlace pulldown menu select “Tags” → “Set TAG1 & TAG2”

Figure 6-6
Click the “Set Tag1 & Tag2” icon located on the PSPlace toolbar.

Figure 6-7
Type SETTAGS in the command line and press Enter.

After the “Set Tag1 & Tag2” command has been executed the “Set Tags” window will appear. Figure 6-8. Whatever you type into the Tag1 and Tag2 text box will be added to the attributes for any symbol placed in the drawing hereafter.

Figure 6-8



Set Tags

The “Tag by Selection” command can be found in two different places in ProjectSymbols.

Figure 6-9

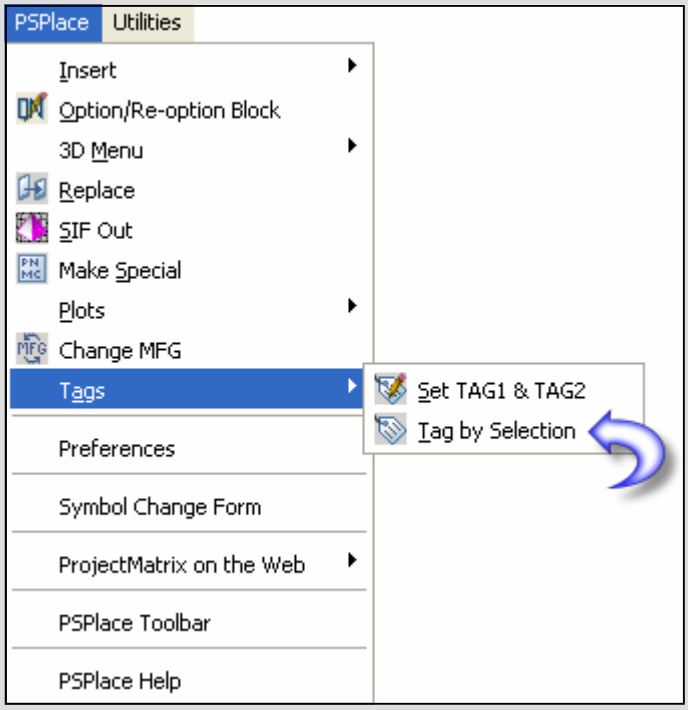
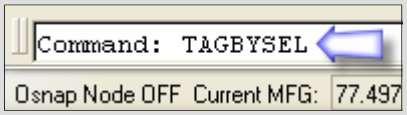


Figure 6-9
From the PSPlace pulldown menu select “Tags” → “Tag by Selection”

Figure 6-10
Type TAGBYSEL in the command line and press Enter.

Figure 6-10



After the “Tag by Selection” command has been executed the “Tag by Selection” dialog box will appear. Figure 6-11. Type in your Tag1 and/or Tag2 information and click the OK button. The command line will now prompt you to “Select objects”. Figure 6-12. Select the symbols you wish to tag and press the Enter key on your keyboard. The symbols you selected should now contain the new tag information that you specified.

Figure 6-11

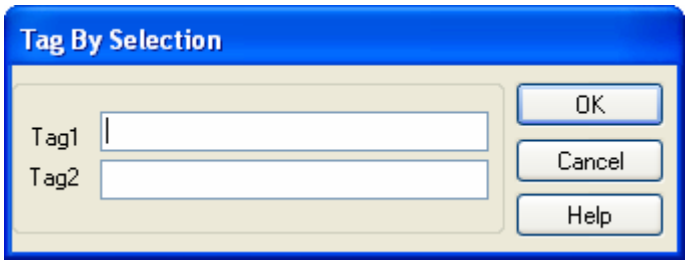
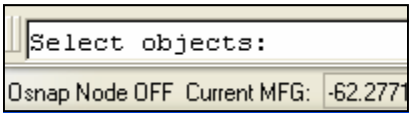


Figure 6-12



Replace

Replace command
The replace command is one of the strongest features of ProjectSymbols. It allows you to replace any symbol, or multiple symbols in your drawing with a different symbol. This can be a great time saver and a critical tool to have when changes need to be made to a design. The “Replace” command can be found in three places in ProjectSymbols.

Figure 6-13

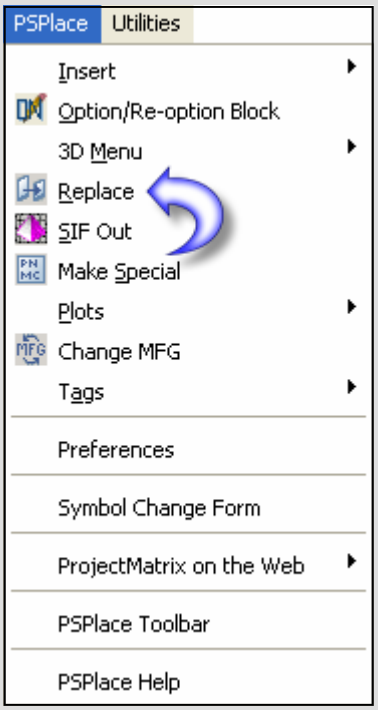


Figure 6-14

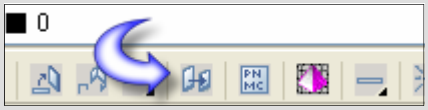


Figure 6-15

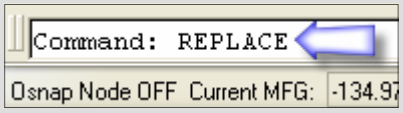


Figure 6-13
From the PSPlace pulldown menu select “Replace”.

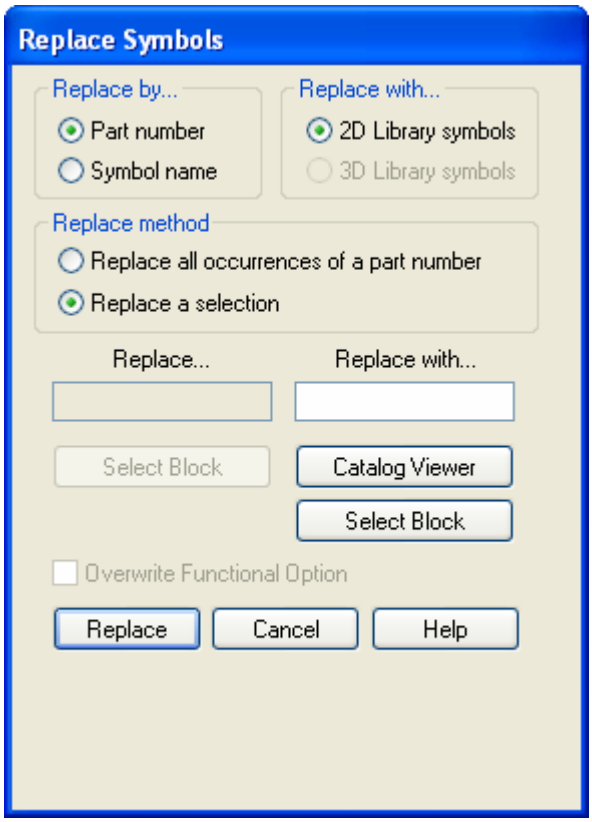
Figure 6-14
Click the “Replace” icon located on the PSPlace toolbar.

Figure 6-15
Type REPLACE in the command line and press Enter.

Replace

After the “Replace” command has been executed the “Replace Symbols” dialog box will appear. Figure 6-16.

Figure 6-16



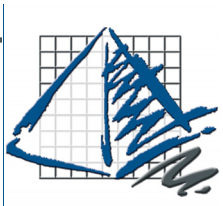
Replace By - There are two ways to replace a symbol; by part number or symbol name.

Replace With - Click whether the replacements are 2D or 3D symbols. *For Haworth users only, it is possible for you to enter this part number using the Catalog Viewer so it will use the Overwrite Functional Option setting if it is checked and if you have a functional option appended. If you manually type in a part number it will use the Overwrite Functional Option setting from the Part Number window.*

Replace Method - Specify “Replace all occurrences of a part number” or “Replace a selection”. *If you specify “Replace a selection” the Replace text box grays out.*

Replace... text box - Specify which part number to be replaced. You can either type in the corresponding part number or click the “Select Block” button to select a block already in the drawing.

Replace with... text box - Specify selected part numbers for your selection. Type them in, use the “Catalog Viewer” button, or the “Select Block” button.



Introduction

SIF Out Introduction

Once you have completed a design layout you can build a parts list and quote in ProjectSpec. To get all of the information from your drawing to ProjectSpec you will be using the “SIF Out” command. SIF Out is the process of creating a SIF file. This file will contain a list of all symbols that you select. Once the file is created you can open this file in ProjectSpec and then option out, price, discount, and build a quote from the SIF file.

SIF Out

The “SIF Out” command can be found in three different places in ProjectSymbols.

Figure 7-1

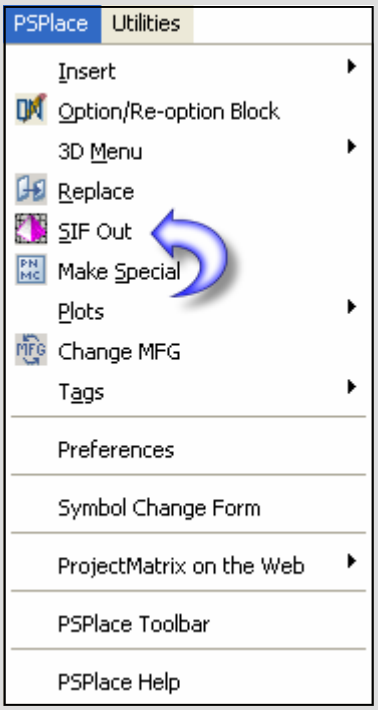


Figure 7-2

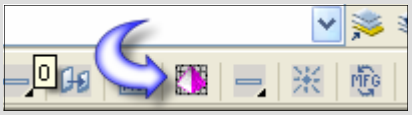


Figure 7-3

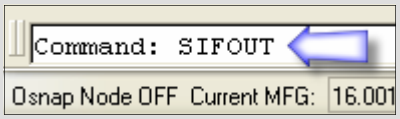


Figure 7-1
From the PSPlace pulldown menu select “SIF Out”.

Figure 7-2
Click the “SIF Out” icon located on the PSPlace toolbar.

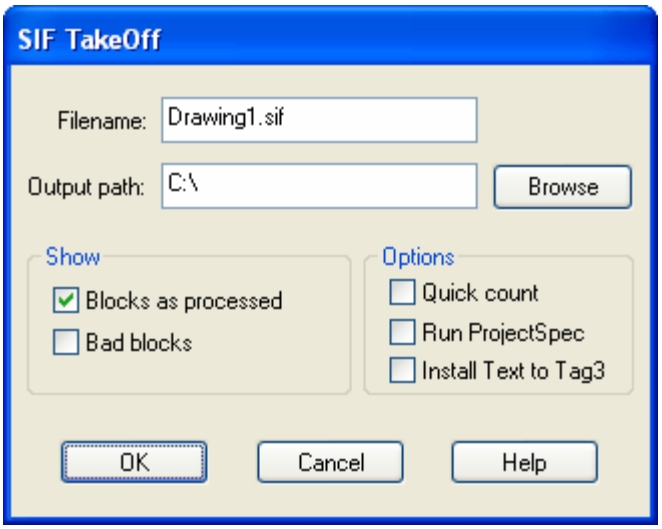
Figure 7-3
Type SIFOUT in the command line and press Enter.

SIF Out

After the SIF Out command has been executed the AutoCAD command line will read “Select objects”. Figure 7-4. Choose the symbols you wish to include in the SIF file. After you have selected the appropriate symbols the SIF Takeoff window will appear. Figure 7-5.

Figure 7-4

Figure 7-5



The SIF Takeoff window, Figure 7-5, allows you to define the SIF Out parameters. In this window you specify the SIF filename, the path it should be saved to, and the desired feedback

Filename - Type in the filename for the SIF file. Be sure to include the SIF extension.

Output Path - Allow you to choose the place on your hard drive where the SIF file will be saved.

Show - Check the “Blocks as Processed” checkbox if you want the SIF takeout processing to show onscreen. *recommended*. Check the “Bad Blocks” checkbox if you want the takeoff to alert you of bad blocks with no attributes. *recommended if there are many special symbols*. If “Bad Blocks” is not checked, the takeoff will still be created, but it will not include the bad blocks.

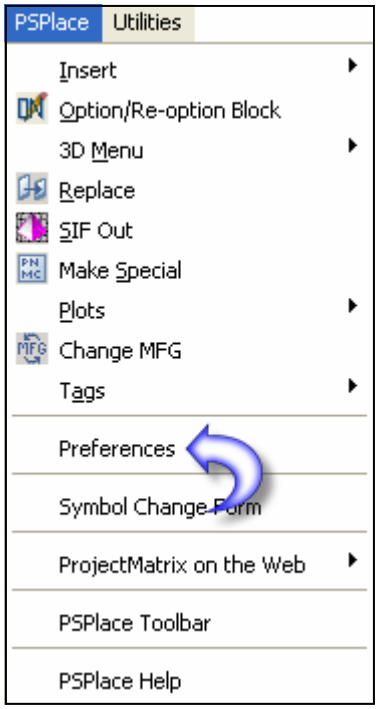
Options - Check the “Quick Count” checkbox if you want the SIF takeout processing to show onscreen. This option does not create the SIF file. Check the Run ProjectSpec checkbox to have ProjectSpec automatically open upon completing the takeoff.

Preferences

Preferences

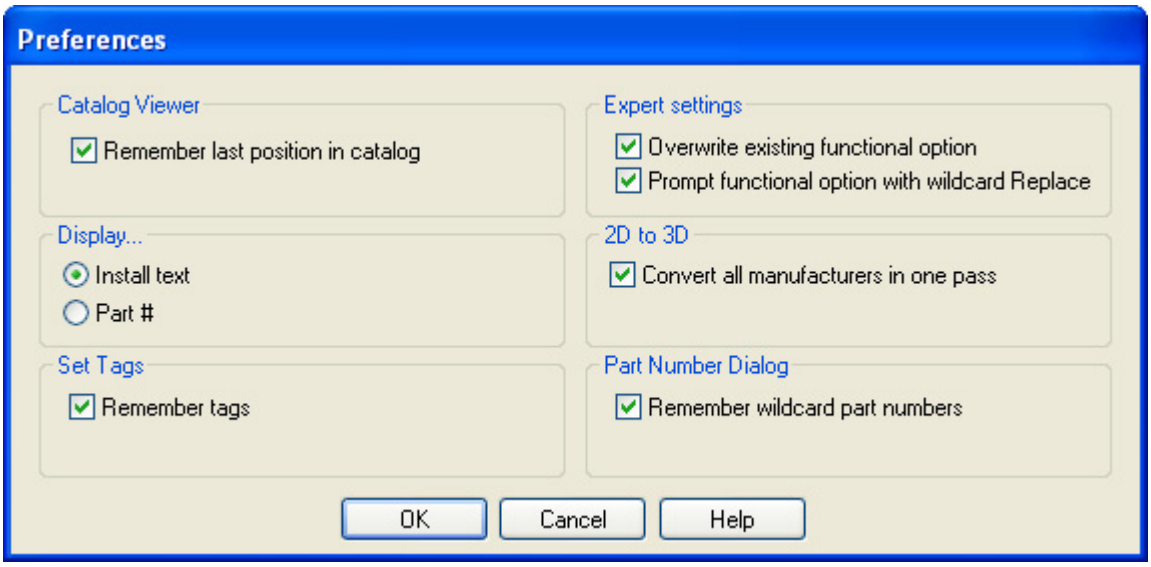
The preferences window can be found under the PSPlace pulldown menu. Figure 7-6. Here you can change various ProjectSymbols settings to enhance your ProjectSymbols experience.

Figure 7-6



Preferences

Figure 7-7



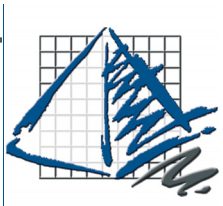
The “Preferences” dialog box allows you to configure several settings within ProjectSymbols' PSPlace interface. Figure 7-7.

Catalog Viewer - Check the box to remember the last position in the catalog. It is recommended you leave this checked. Un-checking this box forces you to select the manufacturer code and dig through the table of contents each time.

Display - Decide whether or not you want to display install text or part numbers.

Set Tags - Decide whether or not the tags you set are remembered. It is recommended you leave this checked.

Expert Settings - Allows you to specify the existing functional option will be overwritten. It is recommended you leave this checked.

2D to 3D - Turning this "on" will convert all manufacturers in one pass. It is recommended you leave this checked because the program will only recognize parts from the current manufacturer otherwise.

Part Number Dialog - check this "on" to have the program remember wildcard part numbers. If this is un-checked, the selected part number will be remembered.