

User's Guide

www.punchsoftware.com

SUPER HOMESUME

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Chapter one INTRODUCTION

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ABOUT THIS GUIDE

This User's Manual is designed to familiarize you with **Punch! Super Home Suite's** various programs, tools, and their uses. You will need to be comfortable with the Windows environment and understand the following terms:

- Click Press and release the left button on the mouse.
- Right-Click Press and release the right button on the mouse.
- Double-Click Press and release the left button on the mouse twice
- Click & Drag Press the left mouse button and hold it down while moving the mouse.
- Drag & Drop Selecting an item or some text and then moving it to a new location.
- Release Taking your finger off the mouse button.
- Scrolling Scroll bars are located at the right and bottom of the window.
 You can reposition the floorplan by clicking on the arrows at the ends of each scroll bar.

If these terms and techniques are unfamiliar to you, please take some time to become acquainted with them before continuing.

SYSTEM SPECIFICATIONS

Recommended

- Pentium Processor
- Windows®95, 98 or Higher
- 16 MB of RAM
- 175 MB of Hard Disk Space before installation
- 100 MB of usable Hard Disk Space after installation
- VGA Video Card set at 800x600 Resolution & 16 bit Color Depth
- CD-ROM
- Mouse or other pointing Device

Minimum

- 486-DX Processor
- Windows®95 or Higher
- 8 MB of RAM
- 175 MB of Hard Disk Space before installation
- 100 MB of usable Hard Disk Space after installation
- VGA Video Card set at 800x600 Resolution & 16 bit Color Depth
- CD-ROM
- Mouse or other pointing Device

INSTALLING PUNCH! SUPER HOME SUITE

- 1. A fragmented hard drive is a common cause of installation errors when installing new software. We recommend that you defragment your hard drive before beginning installation.
- 2. Place the **Punch! Super Home Suite** CD-ROM in the CD-ROM drive of your computer.
- 3. Run "Windows Explorer" from the "Start" menu and Double-Click the "SuperSetup.exe" program from the directory window for your CD-ROM drive.
- 4. Follow the installation instructions on your screen to install **Punch!** Super Home Suite.
- 5. When the program installation is almost complete, you will be asked if you wish to install Adobe® Acrobat Reader. This program will need to be installed if you wish to view the on-line PDF User's Guide.
- 6. If you have Internet access, please follow the link to the URL to register your software online. If not, please call 1-800-365-4832 to register.
- 7. The installer will automatically place a short-cut to **Punch! Super Home Suite** inside the "Start" menu.

INSTALLING PUNCH! SUPER HOME SUITE 3D VIEWERS

- 1. Place the **Punch! Super Home Suite** CD-ROM in the CD-ROM drive of your computer.
- 2. Run "Windows Explorer" from the "Start" menu. Inside the folder named "Viewers" you will find five subfolders. Open the folder named "Viewer1" and Double-Click the "Viewer1.EXE" program.
- 3. Follow the installation instructions on your screen.
- 4. The installer will automatically place a short-cut to **Punch! Super Home Suite** 3D Viewer inside the "Start" menu.

REGISTERING YOUR COPY OF PUNCH! SUPER HOME SUITE

It is important that you register your copy of **Punch! Super Home Suite**. Software registration allows you to obtain technical support and enables us to notify you of software updates. Registration is quick and easy; simply call our toll-free number (please have your **Punch! Super Home Suite** serial number available when you call). The serial number is located on the back of the jewel case.

PUNCH! SOFTWARE TOLL-FREE REGISTRATION: 1-800-365-4832

If you chose not to register your software during the installation process, you may register it on-line at any time by visiting to www.punchsoftware.com

PUNCH! TECHNICAL SUPPORT

Technical support is available by email at "techsupport@punchsoftware.com" and by phone, free for 60 days from the date of purchase, \$10 per call thereafter at 1-800-365-4832. You must have your **Punch! Super Home Suite** registered serial number available when you call.

IMPORTANT SYSTEM SETTINGS

- 1. Set your Display Settings to 800x600 pixels and High Color (16 Bit). Go to your "Start" menu, select Settings-Control Panel>Display>Settings.
- 2. If you notice that the 3D display is not clear, set back the Graphics Acceleration. Go to your "Start" menu, select Settings>Control Panels> System>Performance>Graphics, then set the acceleration back one notch.
- By default, all **Punch! Super Home Suite** measurements display in Inches, to choose Centimeters go to Design>Unit of Measure..., select Metric.



Your serial number is located on the back of the CD jewel case.

SPEED TIPS

You can "Speed Up" the program by changing some of the program's default settings.

- 1. Close the LiveView window when you are not working in 3D. No 3D calculations are performed when the LiveView window is closed.
- 2. Choose the Quarter-View window size for LiveView instead of Full-View to increase 3D rendering speed. 3D rendering speed increases as the LiveView window becomes smaller in size.
- 3. Set your Display Screen Settings to 16-bit, 65,000 colors for optimum 3D rendering speed.
- 4. You don't have to wait for a 3D view to render every time. Just click the mouse in the LiveView window to interrupt rendering.
- 5. Hide the floors that are not being drawn. By turning off the inactive floors, the program will not waste resources on them.

PROGRAM TIPS

- 1. To diagram HVAC, plumbing and electrical, use the CAD Tool. It allows geometry to be placed on the 2D floorplan without appearing in 3D.
- 2. To design a home with a basement, simply use the first floor as the basement level and the second floor as the main floor. To show this in LiveView, use the Topography Tool to raise the level of the ground around the home.
- 3. If you wish to render shadows from a specific direction, change the light source. From the View menu, choose "3D Lighting," select the direction from which you would like the lighting to appear. Make sure you turn on the 3D Shadow option, also found under the View menu. The LiveView window also includes Lighting & Shadow icons.
- 4. To signify an oddly-shaped lot, use the CAD Tool to draw your exact lot shape. While it will not show in the 3D RealView window, it will print on all 2D plans.

Chapter two

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THE BASICS

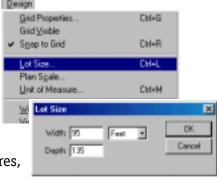
This chapter contains a Quick Start Exercise which covers the basics of **Punch! Super Home Suite**. In the course of this exercise you will create a simple design and learn the function of each tool.

Once you understand the basic concepts that we will cover in this chapter you will be able to design the home of your dreams!

START WITH YOUR LOT SIZE AND SHAPE

First enter the dimensions of your lot. The basic shape of your lot will appear in the window.

Although it isn't necessary for this tutorial, if you have an irregular lot like a cul de sac, select the **CAD Tool** and use the shapes in the preview bar to outline your lot's shape. If your lot has any distinguishing features, i.e. trees, slope, etc., you will want to indicate





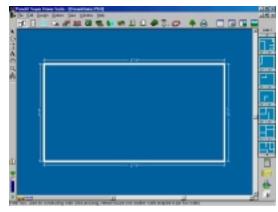
them at this time, too. To define a sloping lot you will need to use the **Topo Tool**. To create a straighter edge (like around a foundation) use more layers to build up the grade.

For more information on the **CAD** and **Topo Tools**, see Chapter 4.

DRAW THE EXTERIOR WALLS

After defining your lot, the next step will be to draw the outside perimeter of your floorplan.

Select the **Wall Tool** and draw a 37'0" x 20'0" rectangle.







The perimeter must be intact for Punch!
Super Home
Suite to accurately calculate square

feet.

When you view your design in RealView and you notice "grass" growing inside your floorplan or you have "carpet" spilling outside, there are walls which will need to be joined.

DRAW THE INTERIOR WALLS

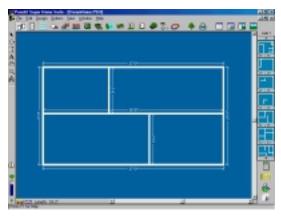
Once you've defined the outer edge of your floorplan, you can begin drawing interior walls. Select the **Wall Tool** again and divide the floorplan into two rooms.

Now, let's change the ceiling height for the entire first floor. Select **Floor Heights** under **Design** menu. Floor Heights are measured in inches. You may also change individual wall heights by Right-clicking on the wall and selecting

Custom Wall Segment.







As you're drawing walls and rooms, you will want to label them. Select the **Text Tool**, type the room name and position it where desired.



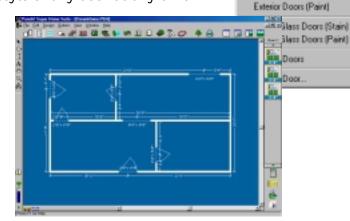
DOORS & OPENINGS



Select the **Door Tool** and then choose from the styles in the drop down menu. Place an **Interior Door** between the two rooms and an **Exterior Door** on an outside wall.

You can change the style of any door at any time

through the **Door Options** menu. This
menu is available under
the **Options** menubar,
the Doors drop down
menu and by Rightclicking the door in the
plan window.



Doors +

✓ Cased Openings (Stain)

Interior Doors (Stain) Interior Doors (Paint)

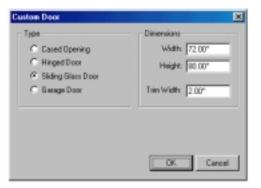
Exterior Doors (Stain)

Cased Openings (Paint)



When placing hinged doors, the first click places the door and a second mouse click sets the direction and angle of the door.





WINDOWS

Select the **Window Tool** and Drag & Drop a few into your design. It is not critical to match the exact placement in these examples.

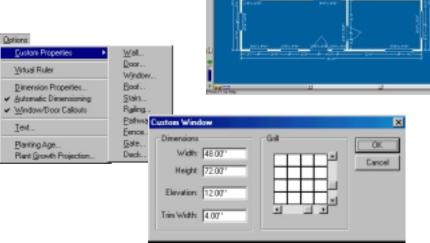
As with **Doors**, and many of the other tools,

you can change the style of any window at any time by calling the

Window Options menu. This menu is available under the Options menubar, the Window drop down menu and by Right-clicking the window in the plan window.







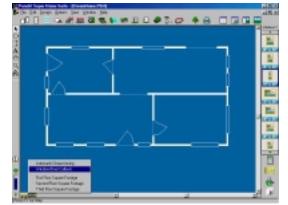
If you want to view your floorplan without the dimensions, deselect Automatic Dimensioning and Window/ Door Callouts under the Options menu or choose from the

Associative Dimension icon at

the bottom of your window.







Punch! Super **Home Suite** makes it easy to tell at a glance on which floor vou are working. Each floor is assigned a separate color. In addition, you can customize your screen color scheme. This option is located under the **Design** Menii.

TIP:

If you wish, you may use the Edit>
Select All command to copy all Walls, Doors and Windows to the Second Floor.

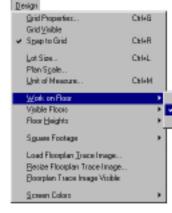
icon.

ADD A SECOND FLOOR

Create a **Second Floor** that is the same size as the **First Floor**. Select an outside wall, then select **Copy to Floor> Upper Floor** from the **Edit** menu.

NOTE:

This step copies all four outside walls and all Doors and Windows contained on these walls, delete the Doors and

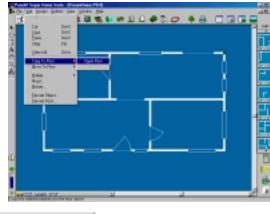


Windows you do not wish to retain.

Select Work on Floor>Work on Second Floor from the Design menu to make the Second Floor active.

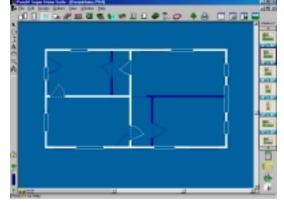
Follow the previous steps to add Interior Walls, Doors and Windows to the Second Floor.

At times you may want to view only the floor that you are designing; this option is available from both the **Design** menubar or the **View Floor**





Work on I hind Floor

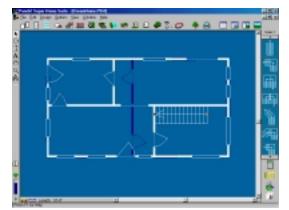




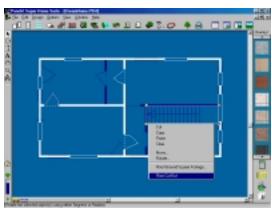
DRAWING STAIRS

Drawing stairs consists of two steps.

1. Select the **Stairs Tool** and **Work On First Floor**. The first click will set the beginning of the stairway and you will end them with a Rightclick. You will be able to tell which way the stairs rise by the arrow.





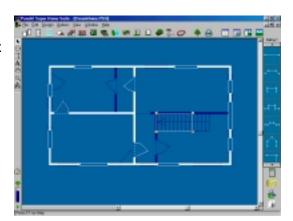


2. To create the opening in the upper floor, select Work On Second Floor and choose the Floor/Ground Covering Tool. With a series of clicks define the opening. Select the Pointer Tool and Right-Click on the floor area. Choose Floor Cut-Out from the Pop-up menu to convert the floor object to a floor cut-out.



ADD A RAILING

Select the **Railing Tool** and **Work On Second Floor**. With a series of clicks, define a railing around the opening you created in the previous step.





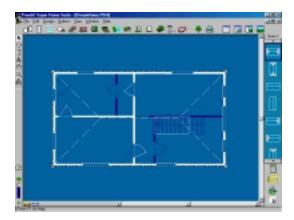
ADD A ROOF

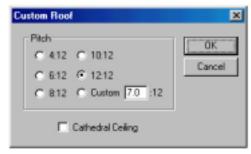
Select the **Roof Tool** and **Work on Second Floor**. Using the default roof style, Drag & Drop it into the plan window. Move it into position by selecting the outside edge. Resize it by selecting a corner.



Right-click on the roof and change the pitch to 6:12.

Although you only need one roof section in this exercise, many floorplans will require several.

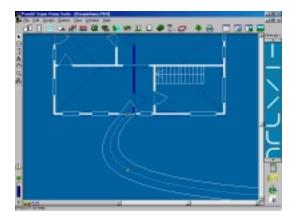




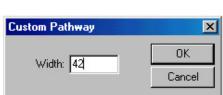
DRAW A SIDEWALK

Select the **Pathway Tool** and **Work on First Floor**. With a series of clicks, define the sidewalk to the front door, end the sidewalk with a Right-click.

Double-click on the **Pathway** you have just drawn and change the width to 42" in the **Custom Pathway** dialogue box.









PUT IN A FLOWERBED AND EDGE IT



Select the **Fill Tool**. Select the middle shape and Drag & Drop it to the left of the sidewalk. To reshape it so that it conforms to the area's shape, select the individual points and move them.

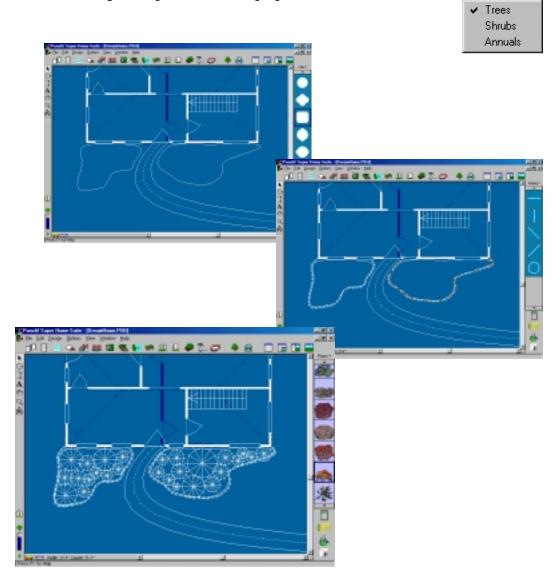


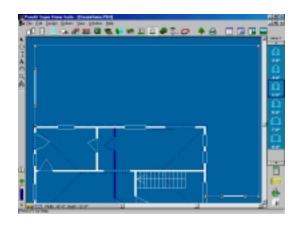
Select the **Edging Tool** and with a series of clicks, define the perimeter of the flowerbed, end the **Edging** with a Right-click.

Plants▼



Select the **Plants Tool**. Select **Annuals** from the Drop-Down menu and Drag & Drop some landscape plants into the flowerbed.





FENCE THE BACKYARD

Select the **Fence Tool** and with a series of clicks define the perimeter of the area you want to fence.



Select the **Gate Tool** and drop in two gates as shown.



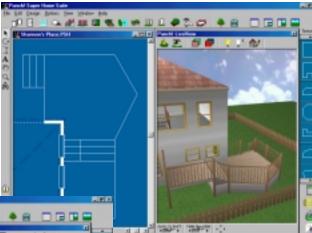


The gate will always conform to the fence style, if you define the fence as **Privacy**, the gate will follow suit.

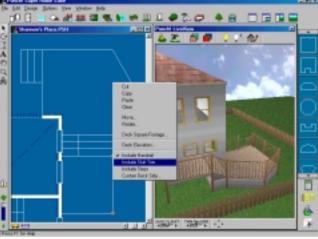
ADD A DECK

Select the **Deck Tool** and with a series of clicks, outline the area where you wish the deck to be.

Right-click on each deck section and specify whether you want that section to include railing, stairs, skirt trim, etc.

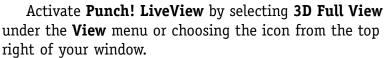






ADD COLORS AND TEXTURES





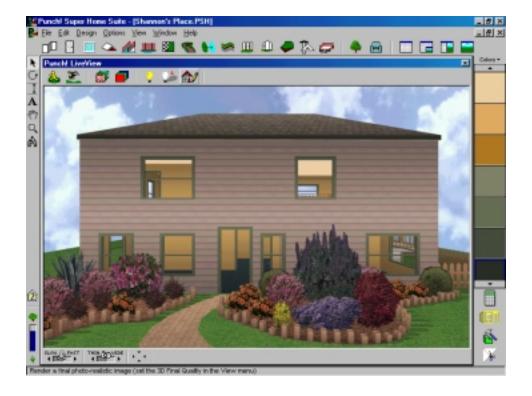


Select the **Texture Tool.** Select **Siding** from the **Texture** Drop-Down menu. Drag & Drop the desired pattern from the Preview Bar onto each outer wall of your design. To expedite this process, Right-click on the color siding then Right-click on each outer wall; end this process with a Double-click (left mouse button).

Once you have finished the outer walls, Select **Roofing** from the **Texture** Drop-Down menu. Drag & Drop your choice onto the roof.

Continue this process until you are satisfied with the outside of your design.

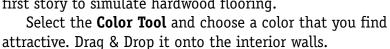




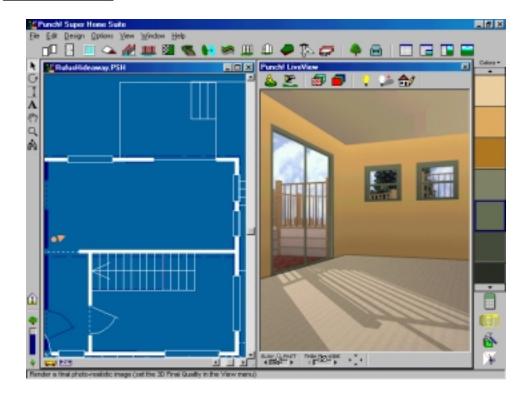
✓ Winter Colors
Spring Colors
Summer Colors
Fall Colors
Contemporary
Gray Tones

Now, let's move to the inside and decorate it.

Select **Wood** from the **Texture** Drop-Down menu. Drag & Drop a selection from the Preview Bar onto the floor of the first story to simulate hardwood flooring.









You're in no way limited to the **Colors** in the Preview Window. If you Double-click on any color you will be presented with the **Color Palatte**. With this palatte you are able to duplicate any color scheme you wish.



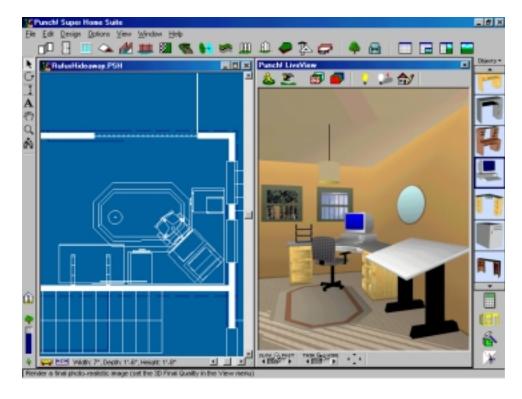
ADD OBJECTS

Select the ${\bf Object}\ {\bf Tool},$ choose ${\bf Office}\ {\bf from}\ {\bf the}\ {\bf Drop\text{-}Down}$ menu.



Activate the **Split Plan View Window.** Drag & Drop the desired **Objects** into the **Plan View** window.





Chapter three PROGRAM TOOLS

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THE PROGRAM TOOLS

The Program Tools are used to control the working environment. They allow you to reduce or enlarge the view, to easily move from one part of a drawing to another and to walk or fly through your designs.



Only objects totally encompassed by the Click & Drag method will be selected.



POINTER TOOL

Use this tool to select, move or resize objects. You may select multiple objects by holding the "Shift" key down while clicking the desired objects or you can Click & Drag around several objects.



ROTATE TOO

The **Rotate Tool** allows you to rotate objects. Select the **Rotate Tool**, then click on what you wish to Rotate, using your mouse Rotate the Object (Wall, Stairway, Roof, etc.) until it is in the position you require. You may also specify a precise degree of rotation in the pop-up menu activated by a right-click or by selecting **Rotate** under the **Edit** menu.



Hold down the Shift key to release the **Rotate Tool's** 45 degree constraint.



NIMENSION TOOL

The **Dimension Tool** is used to add dimensions to areas where they are not automatically generated. It is particularly useful when landscaping to allow enough space between shrubs and trees. To use, Click & Drag between the objects that are to be measured.



TEXT TOOL

The **Text Tool** allows you to add labels to your floorplan. You may change the typeface of your labeling by highlighting the text to be changed and selecting **Type** from the **Options** menu or simply double-click on any piece of text with the **Pointer Tool**.



PAN TOOL

The **Pan Tool** makes it easy to reposition your floorplan in the 2D plan view. When the **Pan Tool** is selected your cursor changes to a hand. Place the Hand anywhere on your floorplan, then Click & Drag your floorplan to reposition it within the viewing window.



ZOOM TOOL

The **Zoom Tool** allows you to get a close-up view of your drawing or zoom out to view the complete floorplan. To enlarge your floorplan, hold the left mouse button down while moving the mouse up. To reduce it, hold the left mouse button down while moving the mouse down. The floorplan will be centered in the window on the spot where you click.



VIEWPOINT TOOL

The **Viewpoint Tool** is a unique 2D/3D navigational aid. It allows you to view your drawing from a spot on the 2D plan. When you select the **Viewpoint Tool** and click in your drawing, **Punch! Super Home Suite** will automatically open a half-screen **Punch! LiveView** window where you will see a 3D rendering of your floorplan.



Measurements made with the Virtual Ruler will be more accurate if you turn off Snap to Grid.

VIRTUAL RULER

Use the **Virtual Ruler** when you wish to figure measurements that are not automatically generated. Toggle the **Virtual Ruler** on and off with the icon at the bottom left of your screen.

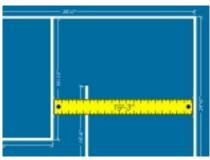


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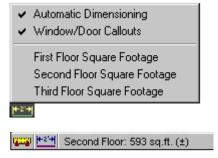
When the **Virtual Ruler** is active, position it so it reaches the span that you wish to measure. The measurement will appear in the middle of the **Virtual Ruler**.



ASSOCIATIVE DIMENSIONING

The **Associative Dimensioning** menu allows you to turn off and on the dimensions of your floorplan and the dimensions of the doors and windows.

You can also keep track of the square footage of each floor individually. When you select either **First**, **Second** or **Third Floor Square Footage** from this menu, the calculation will appear next to the **Associative Dimensioning** icon.



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WALL TOOL

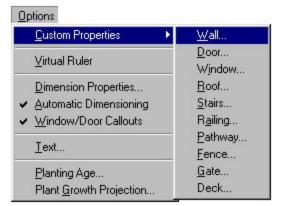
When the **Wall Tool** is selected, previews of the available options will appear in the Preview Bar. To change the default settings, click on the word **Walls** above the previews.

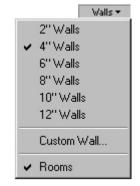
You can Drag & Drop room selections from the Preview Bar or you can manually draw a wall by placing the cursor where you want the wall to begin, then Click & Drag until you reach the length you desire.

A double click on any wall will cause the Custom Wall menu to be displayed. **Automatic Flooring** is the default setting. By deselecting it when you draw an upper floor, you can extend a room up for two or three stories.

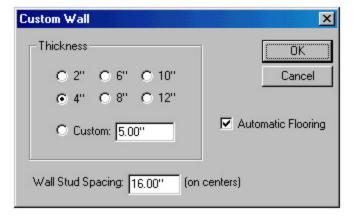


While you are drawing each floor, bear in mind that the perimeter must be intact for Punch! Super Home Suite to accurately calculate square feet. If you view your design in Punch! LiveView and you notice "grass" growing inside your floorplan or you have "carpet" spilling outside, there are walls which will need to be joined.









Drawing a Wall

Select the **Wall Tool**. Click & Drag the mouse anywhere within the design window to draw a Wall. Release the mouse button. The **Interactive Dimensioning** feature will display the length of the wall as it is being drawn.

Drawing a Perpendicular Wall

Select the **Wall Tool**. Click & Drag the mouse anywhere on an existing Wall segment. Release the mouse button.

NOTE.

To release the perpendicular wall constraint, hold down the shift key while you draw a wall.

Connecting a Wall

Select the **Wall Tool**. Place the mouse on the end of an existing Wall. Click & Drag the mouse to the desired length. Release the mouse button. The Wall will join automatically. The wall must NOT be selected. When a Wall is selected, the program will resize the Wall instead of drawing a new Wall. To de-select the Wall, click once anywhere outside the Wall segment.

NOTE:

Punch! Super Home Suite automatically joins wall segments and orients walls at right angles.

Connecting Multiple Walls

Select the **Wall Tool**. Place the mouse on the end of an existing Wall. Click & Drag the mouse to the desired length. Release the mouse button over the end of a wall segment. The Wall will trim and join automatically.

Moving Walls

Select the **Pointer Tool**. Select the Wall you want to move - click the mouse button once on the Wall segment. Click & Drag on the selected Wall segment to move it.

Resizing Walls

Select the **Pointer Tool**. Select the Wall you want to resize - click the mouse button once on the Wall segment. Click & Drag on an Endpoint of the selected Wall segment to resize the Wall. Release the mouse button.



When both endpoints are active, you can move the wall.



When one endpoint is active, you can resize the wall.



DOOR TOOL

When the **Door Tool** is selected, previews of the available options will appear in the Preview Bar. To change the Preview Library, click on the word **Doors** above the previews. You also have the option of custom designing doors to your specifications.

To place a door in your drawing, select from the available options and drag it onto a wall segment. By dragging the door along the wall segment, you can position it according to the **Interactive Dimensioning** which are the temporary dimensions

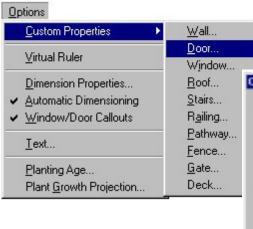
that show while you are positioning doors, windows, etc. These dimensions make accurate positioning much easier and faster.

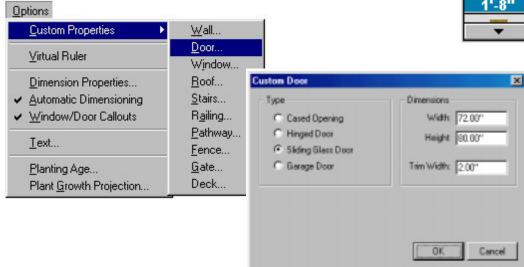
To resize a door, use the **Pointer Tool** to drag one end of the door to its new size. A double click on any door will cause the **Custom Door** menu to be displayed where you can change door type and dimensions.

If you wish to reposition a door, simply drag it to a new place using the **Pointer Tool**.











NOTE:

When placing hinged doors, the first click places the door and a second mouse click sets the direction and angle of the door.

"Drag & Drop" a Door

Select the **Door Tool**. Choose a Door style from the drop-down menu. Select a door from the list. Click & Drag it over a wall segment, then release the mouse button to "drop" the Door into the wall.

Placing Multiple Doors

Select the **Door Tool**. Choose a Door style from the drop-down menu. Select the Door from the list. Click the mouse on a wall segment wherever you wish to position a Door for as many Doors as you wish to place. If you are placing hinged Doors, you will need to click once again after placing the Door. This will set the Door's swing angle.

Moving a Door

Select the **Pointer Tool**. Select the Door - click the mouse button once on the center of a Door. Click & Drag to move the Door along the wall segment. Release the mouse button to reposition the Door. Be sure to Click & Drag from the center of the door. Clicking & Dragging from an endpoint of the Door will resize it.

Resizing a Door

Select the **Pointer Tool**. Select the door - click the mouse button once on the center of a Door. Click & Drag on an endpoint of the Door to resize the Door. Release the mouse button to resize the Door. To customize a Door, Right-Click on a Door and choose "Custom Door..." from the pop-up menu. Or Double-Click on a Door to customize it.



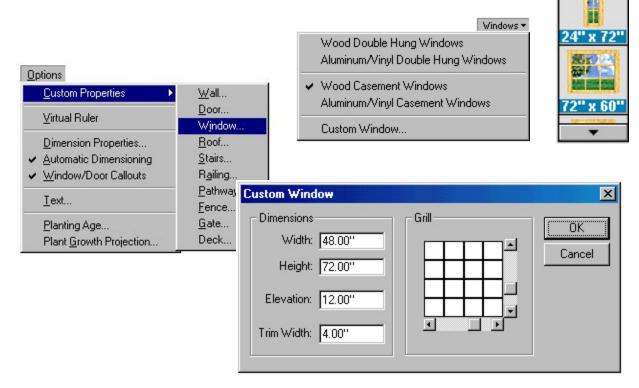
WINDOW TOOL

When the **Window Tool** is selected, previews of the available options will appear in the Preview Bar. To change the Preview Library, click on the word **Windows** above the previews. You also have the option of custom designing windows to your specifications.

Windows ▼

To place a window in your drawing, select from the available options and drag it onto a wall segment. By dragging a window along the wall segment, you can position it according to the **Interactive Dimensioning**. To place more than one window of any kind, click on the preview then click at the various sites you wish windows installed. When you are finished, Right-click.

To resize a window, use the **Pointer Tool** to drag one end of the window to its new size. A double click on any window will cause the **Custom Window** menu to be displayed.



"Drag & Drop" a Window

Select the **Window Tool**. Choose a Window style from the drop-down menu. Select a Window from the list. Click & Drag it over a wall segment, then release the mouse button to "drop" the Window into the wall.

Placing Multiple Windows

Select the **Window Tool**. Choose a Window style from the drop-down menu as in Step 2 above. Select the Window from the list. Click the mouse on a wall segment wherever you wish to position a Window.

Moving a Window

Select the **Pointer Tool**. Select the Window - click the mouse button once on the center of a Window. Click & Drag on the center of the Window along the wall segment. Release the mouse button to reposition the Window. Note: Be sure to Click & Drag from the center of the Window. Clicking & Dragging from an endpoint of the Window will resize it.

Resizing a Window

Select the **Pointer Tool**. Select the Window - click the mouse button once on the center of a Window. Click & Drag on an endpoint of the Window along the wall segment to resize the Window. Release the mouse button to resize the Window. Note: To customize a Window, Right-Click on a Window and choose "Custom Window..." from the pop-up menu. Or Double-Click on a Window to customize it.

Customizing a Window

Select the **Pointer Tool**. Right click on the Window you wish to customize. Enter the Width, Height, Elevation and Trim Width you want. In the Grill section, the sliders at the right and bottom of the image control the number of panes in the window.



ROOF TOOL

When the **Roof Tool** is selected, previews of the available options will appear in the Preview Bar. To change the Preview Library, click on the word **Roofs** above the previews.

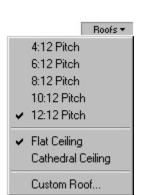
To place a **Roof** in your drawing, select from the available options and drag it onto your design. Resize the **Roof** by dragging from any corner.

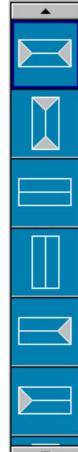
You will notice that the direction of the **Roof** peak is automatically created along the widest distance of the **Roof**. If the peak is desired along the narrow distance, Drag & Drop the appropriate roof from the Preview Bar and resize it after it is drawn. Resizing will not change the direction of peak of the roof.

To move the **Roof**, drag it from a boundary frame. To constrain movement to horizontal or vertical, hold the Shift key down.

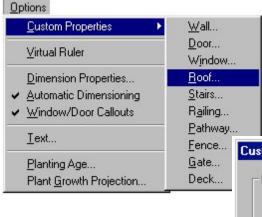
A shortcut to the **Custom Roof** menu is a Right-click on the **Roof** you wish to customize.







Roofs ▼





"Drag & Drop" a Roof

Select the **Roof Tool**. Select a roof pitch from the drop-down menu. Select a Roof from the list. Click & Drag it into the design window and release the mouse button.

Drawing a Roof

Select the **Roof Tool**. Select a roof pitch from the drop-down menu. Select a Roof style from the list. Position the mouse within the design window. Click & Drag the mouse to begin drawing the Roof. Release the mouse button to create the Roof. If you wish to create eaves, you will want to draw your roof slightly larger than your walls.

Moving a Roof

Select the **Pointer Tool**. Select the Roof - click the mouse button on the boundary frame. Click & Drag on the boundary frame of the Roof to move it. Release the mouse button to reposition the Roof. Note: Hold the Shift Key down to constrain movement in horizontal & vertical directions. Be sure to Click & Drag from the boundary frame of the roof. Clicking & Dragging from the corner selection handles will resize it.

Resizing a Roof

Select the **Pointer Tool**. Select the Roof - click the mouse button on the boundary frame. Click & Drag on a corner selection handle to stretch or shrink the Roof's size. Release the mouse button to reposition the Roof. To customize an existing Roof, Right-Click on an existing Roof and choose "Custom Roof…" from the pop-up menu. Or Double-Click on a roof to customize it.

NOTE.

If you mistakenly draw the roof on the wrong floor, use the the Move To Floor>Upper Floor command in

the Edit menu.



STAIRS TOOL

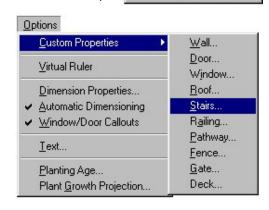
When the **Stairs Tool** is selected, previews of the available options will appear in the Preview Bar. To change the Preview Library, click on the word **Stairs** above the previews.

Drawing stairs consists of two steps. The first step is drawing the stairs themselves (or you can Drag & Drop from the Preview Bar) and the second is defining an opening in the upper Stairs ▼

floor for the stairs to enter.

When drawing **Stairs** from the 1st Floor to the 2nd Floor, select the Stairs Tool, make sure the 1st Floor is the active floor.

then perform a series of mouse clicks in the direction you wish the Stairway to rise, a right mouse click will end the Stairs. You will be able to see which way the Stairs rise by the arrows.



Straight Staircase

Curved Staircase

Custom Staircase...

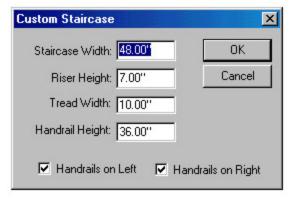
Stairs *

Drawing a Stairway

Select the **Stairs Tool**. Choose Straight Staircase, Curved Staircase or Custom Staircase. Click and release the mouse button, then drag to the desired stair length. Clicking more than one point

will create stairs with landings. Dragging one orange endpoint at an angle will

create angled stairs with landings. Double-click to complete. In multistory designs, changing the height of the floor will automatically update the stair height to that floor, the exception being if the stairs were not drawn long enough initially. In this case it is better to draw stairs longer than necessary and then adjust.





To draw a Ramp for Wheelchair Accessibility, first draw a curved Stairway. Set the Staircase Width to 60 inches and the Riser Height to 0 (zero). You will be able to extend the Ramp to whatever length you need. Select the center point, choose Elevate Object from the Edit Menu, enter half the distance you wish your ramp to incline. Then select the end point, choose Elevate Object from the Edit Menu and enter the total height you wish your ramp to incline.



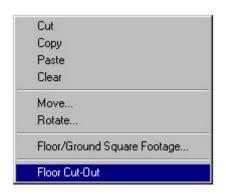




Floor cut-outs will not appear when moving in 3D. They will, however, appear after movement is stopped.

Create an Opening for the Stairs

After drawing a stairway, you may need to "cut an opening" in the floor above. Select Work on Second Floor (or Third Floor, if applicable) from the Design drop-down menu. Choose the Floor/Ground Cover Tool. With a series of clicks, outline the floor area where you want the cut-out to be. Right-click after placing the last point to close the floor area. Select the Pointer tool and Right-Click on the floor area you just outlined. Choose Floor





Cut-Out from the Pop-up menu to convert the floor object to a floor cut-out.

"Drag & Drop" a Stairway

Select the **Stairs Tool**. Select a Stairway from the list. Click & Drag it into the design window and release the mouse button.

Moving a Stairway

Select the **Pointer Tool**. Click on any part of the staircase direction arrows other than the orange endpoints. Click & Drag the stairs to the desired location within the file.



You can control the number of steps by changing the Riser Height in the Custom Staircase menu. The default number of steps is the Floor Height (set in Design>Floor Heights) divided by the Riser Height. While it is possible to draw a staircase that is shorter than the ceiling, it is not possible to draw a stairway which extends above the ceiling.

Resizing a Stairway

Select the **Pointer Tool**. Click on any part of the staircase direction arrows other than the orange endpoints. Drag the endpoint(s) to extend or shorten the length of the staircase. The program will automatically stop the stairs at the next floor level.

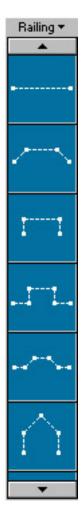
Customizing a Stairway

Select the **Pointer Tool**. Right-click or double-click on any part of the staircase direction arrows other than the orange endpoints. Staircase width, riser height, tread width and handrail options can be changed from this dialog box.

Drawing & Resizing a Curved Staircase

Select the **Staircase Tool**. Choose **Curved Staircase**. Click and release the mouse button, determine the arc size of the staircase, then click again. To change staircase arc, click any orange endpoint and drag. Double-click to access customized properties such as staircase width, riser height, tread width and handrail options.

X



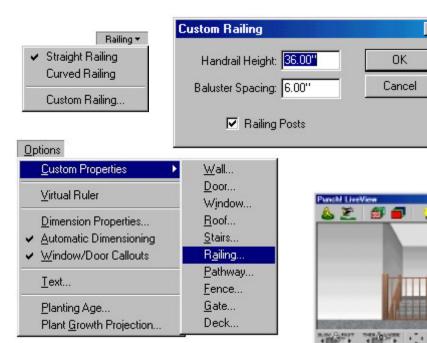
RAILING TOOL

When the **Railing Tool** is selected, previews of the available options will appear in the Preview Bar. To change the Preview Library, click on the word **Railing** above the previews.



Draw your Railing by performing a series of mouse clicks, a right mouse click will end the Railing.

A double click on any part of the **Railing** will cause the **Custom Railing** menu to be displayed.



Drawing a Railing

Select the **Railing Tool**. Choose Straight Railing, Curved Railing or Custom Railing. Click and release the mouse button, then drag to the desired rail length. Right-click to complete.

Moving a Railing

Select the **Railing Tool**. Click on any part of the dashed line. Two orange endpoints will appear. Click & Drag the railing to the desired location within the file.



FLOORING/GROUND COVERING TOOL

When the **Flooring/Ground Covering Tool** is selected, previews of the available options will appear in the Preview Bar. To change the Preview Library, click on the word **Flooring** above the previews.

By performing a series of mouse clicks, outline the area where you wish the **Flooring/Ground Covering** to be placed. A right mouse click will end the area.



"Drag & Drop" Floor/Ground Cover

Select the **Flooring/Ground Covering Tool**. Choose either Interior Flooring or Exterior Ground Covering. Click & Drag an entry from the list of Flooring/Ground Covering styles. Release the mouse button anywhere in the 2D plan view. Resize this shape using the orange endpoints.



Drawing Custom Floor/Ground Cover

Select the **Flooring/ Ground Covering Tool**. Then choose either Interior Flooring or Exterior Ground Covering. Position the mouse within the design window. Click the mouse button once to set the first point of the Floor/Ground perimeter. With a series of clicks, outline the Floor/Ground perimeter. After placing the final perimeter point, Right-Click to end. The final perimeter point will automatically be connected to the first point to complete the shape.

*

You can temporarily deactive the horizontal & vertical constraint by holding down the Shift Key while drawing.

Moving Floor/Ground Cover

Select the **Pointer Tool**. Select the Floor/Ground perimeter by clicking on the boundary frame. Click & Drag on the boundary frame to move the Floor/Ground Covering. Release the mouse button to reposition the Floor/Ground Covering. Note: Hold the Shift Key down to constrain movement in horizontal & vertical directions. Be sure to Click & Drag from the boundary frame of the Floor/Ground Covering. If you Click & Drag from the corner selection handles the area will be reshaped.

Reshaping Floor/Ground Cover

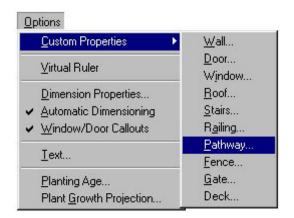
Select the **Pointer Tool**. Select the Floor/Ground perimeter by clicking on the boundary frame. Click & Drag on a point selection handle to reshape the Floor/Ground Covering. Release the mouse button to reposition the Floor/Ground Covering.



PATHWAY TOOL

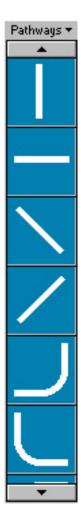
When the **Pathway Tool** is selected, previews of the available options will appear in the Preview Bar. To change the Preview Library, click on the word **Pathways** above the previews.

You can either Drag & Drop a Pathway from the Preview Bar or draw one to meet your individual needs. Draw a Pathway by performing a series of mouse clicks, a right mouse click will end the Pathway. Selecting the **Custom Pathway** option will display this menu:









"Drag & Drop" a Pathway

Select the **Pathway Tool**. Choose a Pathway or Driveway Option from the drop-down menu. Click & Drag an entry from the list of Pathway styles. Release the mouse button anywhere within the design window.

Drawing a Custom Pathway

Select the **Pathway Tool**. Then choose from the listing of Pathway styles. Position the mouse within the design window. Click the mouse button once to set the first point of the Pathway. Move the mouse to the location for the next Pathway point and click to set that point. Repeat this step until all the Pathway points have been set. After placing the final Pathway point, Right-Click to end.

Moving a Pathway

Select the **Pointer Tool**. Select the pathway by clicking on the center-line. Click & Drag on the center-line to move the pathway. Release the mouse button to reposition the pathway.

Reshaping a Pathway

Select the **Pointer Tool**. Select the Pathway by clicking on the center-line. Click & Drag on a point selection handle to reshape the Pathway. Release the mouse button to reshape the Pathway.



Hold the Shift Key down to constrain movement in horizontal & vertical directions. Be sure to Click & Drag from the center-line of the Pathway. Clicking & Dragging from the corner selection handles will reshape it.



FILL REGION TOOL

When the **Fill Region Tool** is selected, previews of the available options will appear in the Preview Bar. To change the Preview Library, click on the word **Fills** above the previews.

You can either Drag & Drop a shape from the Preview Bar or draw one to meet your needs. Use this feature to provide interesting planting beds in your

Landscape or a fun Playground for the kids.



Fills ▼

"Drag & Drop" Fill Regions

Select the **Fill Region Tool**. Choose a Fill style from the drop-down menu. Drag & Drop an entry from the list of Fill Regions. Release the mouse button anywhere within the design window.

Drawing Fill Regions

Select the **Fill Region Tool**. Then choose from the listing of Fill styles. Position the mouse within the design window. Click & Drag the mouse to draw the desired Fill Region size. Release the mouse button to create the Fill Region. This will draw round Fill Regions, create elliptical regions by holding the Shift Key down.

Moving Fill Regions

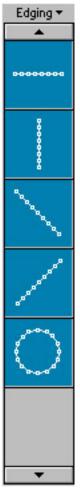
Select the **Pointer Tool**. Select the Fill Region by clicking on the boundary frame. Click & Drag on the boundary frame to move the Fill Region. Release the mouse button to reposition the region. Be sure to Click & Drag from the boundary frame of the Fill Region. Clicking & Dragging from the point selection handles will reshape it.

Reshaping Fill Regions

Select the **Pointer Tool**. Select the Fill Region by clicking on the boundary frame. Click & Drag on the point selection handle to reshape the Fill Region. Release the mouse button to reposition the region.



Hold the Shift Key down to constrain movement in horizontal & vertical directions.



EDGING TOOL

When the **Edging Tool** is selected, previews of the available options will appear in the Preview Bar. To change the Preview Library, click on the word **Edging** above the previews.



You can either Drag & Drop an Edging from the Preview Bar or draw one to meet your needs.

Draw an Edging by performing a series of mouse clicks, a right mouse click will end the Edging.



"Drag & Drop" Edging

Select the **Edging Tool**. Choose an Edging style from the drop-down menu. Click & Drag an entry from the list of Edging shapes. Release the mouse button anywhere within the design window.

Drawing Custom Edging

Select the **Edging Tool**. Then choose from the listing of Edging styles. Position the mouse within the design window. Click the mouse button to set the first point of the Edging. Move the mouse to the location for the next Edging point and

click to set that point. Repeat this step until all the Edging points have been set. After placing the final edging point, Right-Click to end the Edging drawing.

Reshaping Edging

Select the **Pointer Tool**. Select the Edging by clicking on the center-line. Click & Drag on the point selection handles. Release the mouse button to reshape the Edging. To customize an existing Edging, select the Edging, Right-Click then choose "Custom Edging..." from the pop-up menu. Or simply Double-Click on the Edging.

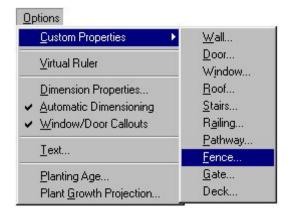


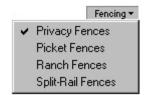
FENCE TOOL

When the **Fence Tool** is selected, previews of the available options will appear in the Preview Bar. To change the Preview Library, click on the word **Fencing** above the previews.

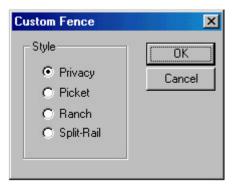
You can either Drag & Drop a Fence from the Preview Bar or draw one to meet your needs.

Draw a Fence by performing a series of mouse clicks, a right mouse click will end the Fence.





Fencing *





You can Drag & Drop Textures onto your Fence, to further customize it.

"Drag & Drop" Fencing

Select the **Fencing Tool**. Choose a Fencing style from the drop-down menu. Click & Drag an entry from the list of fencing shapes. Release the mouse button anywhere within the design window.

Drawing Fencing

Select the **Fencing Tool**. Then choose from the listing of Fencing styles. Position the mouse within the design window. Click the mouse button to set the first point of the Fencing. Move the mouse to the location for the next Fencing point and click to set that point. Repeat this step until all the Fencing points have been set. After placing the final fence point, Right-Click to end the fence drawing.

constrain movement in horizontal & Reshaping Fencing vertical

Select the **Pointer Tool**. Select the Fencing by clicking on the boundary frame. Click & Drag on the point selection handles to reshape the Fence. Release the mouse button to reshape the fence. To customize an existing fence, select the Fence, Right-Click then choose "Custom Fence..." from the pop-up menu. Or simply Double-Click on the Fence.

Hold the Shift Key down to directions.



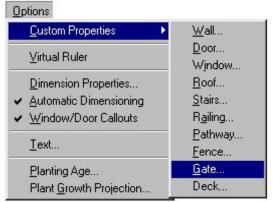
GATE TOOL

When the **Gate Tool** is selected, previews of available Gate widths will appear in the Preview Bar.

Simply Drag & Drop a gate into your existing fence.



When you place a Gate on an existing fence, the Gate will always conform to the type of fencing used; i.e., if it is a Privacy Fence, a Privacy Gate will be placed.







"Drag & Drop" a Gate

Select the **Gate Tool**. Choose a standard-sized Gate. Click & Drag an entry from the list. Release the mouse button over a fence segment to place the Gate. Note: The Gate's style will be the same style as the fence receiving the Gate. To specify a custom Gate size, select "Custom Gate..." from the drop-down menu and type in the desired width.

Placing Multiple Gates

Select the **Gate Tool**. Click once on a standard-sized Gate. Place the mouse on a fence segment and click to position a Gate. Click along the fence wherever you wish to place a gate.

Moving a Gate

Select the **Pointer Tool**. Select the Gate by clicking in the center of it. Click & Drag on the center to move the Gate along the fence. Release the mouse button to move the Gate. Note: Be sure to Click & Drag from the center of the Gate. Clicking & Dragging from the end-points will resize it.

Resizing a Gate

Select the **Pointer Tool**. Select the Gate by clicking in the center of it. Click & Drag on an end-point to resize the Gate. Release the mouse button to resize the Gate.

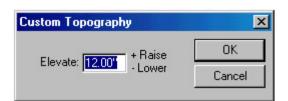


TOPOGRAPHY TOOL

When the **Topography Tool** is selected, previews of the available options will appear in the Preview Bar. To customize the topography grade, click on the word Topo above the previews and choose Custom Topography. You will be presented with the following dialogue box. Enter the rise (or fall) you wish to create.



To build a splitlevel home or a home with a basement, use the Topography Tool to "build up" the land around your First Floor. In the case of a basement, the Second Floor will become the ground level floor and the Third Floor will be the second story.



"Drag & Drop" Topography

Select the **Topography Tool**. Choose a standard Topography shape. Click & Drag an entry from the list. To set the actual "lay-of-the-land" choose "Custom Topography..." Then raise and lower the values of each layer in the pop-up menu. Topography with the "+" sign indicate hills and the "-" sign indicates valley.

Drawing Topography

Select the **Topography Tool**. Position the mouse within the design window. Click the mouse button to set the first point of the new Topography. Move the mouse to the location for the next Topography point and click to set that point. Repeat this step until all the Topography points have been set. After placing the final Topography point, Right-Click to end the Topography drawing.



Moving Topography

Select the **Pointer Tool**. Select the Topography by clicking on the boundary frame. Click & Drag on the boundary frame to move the selected area. Release the mouse button to reposition the region.

WATE.

To draw a straight line, place many points just a few inches apart.

Reshaping Topography

Select the **Pointer Tool**. Select the Topography by clicking on the boundary frame. Click & Drag on the point selection handles to reshape the Topography. Release the mouse button to reshape the area.



CAD TOOL

The **CAD Tool** is especially useful when diagramming things that you don't wish to appear in the 3D views. It allows geometry like plumbing, electrical, HVAC, outdoor sprinkler systems, etc., to be placed.

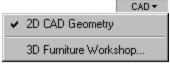


"Drag & Drop" CAD

Select the **CAD Tool**. Choose a standard shape. Click & Drag an entry from the list.

Reshaping CAD

Select the **Pointer Tool**. Select the CAD Geometry item by clicking on the boundary frame. Click & Drag on the point selection handles to reshape the CAD item. Release the mouse button to reshape the area.







To constrain the decking to horizontal or vertical, hold the Shift key down.

DECK TOOL

When the **Deck Tool** is selected, previews of the available options will appear in the Preview Bar.

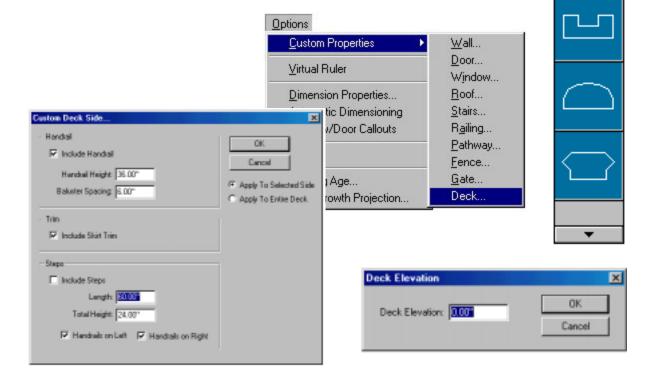
You can Drag & Drop a Deck from the Preview Bar or draw one to meet your needs.

Decks ▼

Draw a **Deck** by performing a series of mouse clicks. A post will appear in the railing at the location of each click. You have the option of specifying **Skirting**, **Steps** and **Railing** for each deck section. You also have the option of elevating the deck.

By Right-clicking on any Deck piece and selecting **Custom Deck Side** from the menu, you will be able to change the Skirting, Step and Railing options for the entire deck.

To add a **Deck** to the **Second Floor**, draw the deck on the First Floor and specify an elevation equal to the ceiling height of your first floor. Right click on the deck piece where you wish to add stairs and specify the **Total Height** equal to the elevation.



"Drag & Drop" A Deck

Select the **Deck Tool**. Choose a Deck style from the Preview Bar. Click &

Drag it into position in the design window. Release the mouse button anywhere within the design window.

Drawing A Deck

Select the **Deck Tool**. Position the mouse within the design window. Click the mouse button to set the first post for the deck. Move the mouse to the location for the next post and click to set that point. Right click on each Deck piece and specify if it needs skirting, steps or railing.

Reshaping A Deck

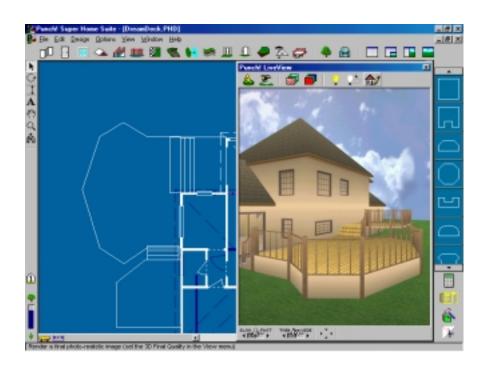
Select the **Pointer Tool**. Select the Deck by clicking on the boundary frame. Click & Drag on a point selection handle to reshape the Deck. Polese

point selection handle to reshape the Deck. Release the mouse button to reshape the Deck.





The Interactive
Dimensioning
feature will be
very handy
during Deck
design. You will
be able to space
posts exactly as
far apart as the
building code in
your area
requires.





LANDSCAPING TOOL

When the **Landscaping Tool** is selected, previews of the available options will appear in the Preview Bar. To change the Preview Library, click on the word Plants above the previews.





Drag & Drop your choice of plants into your 2D design window. To further customize your Landscape settings, select **Planting Age** under the **Options** Menu. You can select a

different Planting Age for each plant you choose.



Enter the age you wish the plants to be when they are placed in the design. Then select **Plant Growth Projection** from the **Options** Menu.

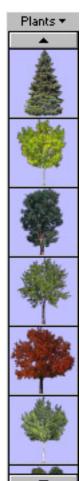
Enter the maximum age that plants may be grown to represent. The default is 20 years. The

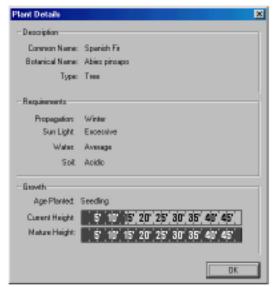
minimum is 3 months and the maximum is 50 years.



Punch! Super Home Suite also allows you the unique ability to watch your plants grow! To grow your plants, select the **Plant Growth Scale** located in the lower left portion of your screen.

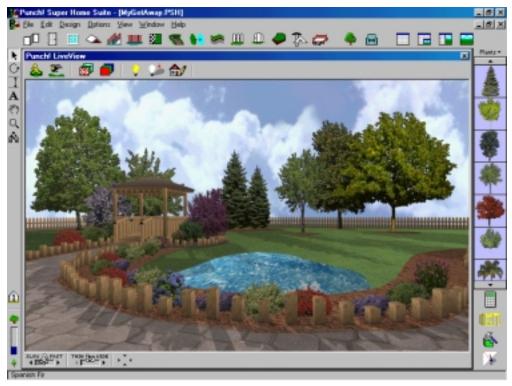
By depressing the left mouse button on the **upper** tree, you will increase the age and size of your landscape plantings. By depressing the left mouse button on the **lower** tree, you will decrease the age and size of your landscape plantings.





To view the **Plant Details** of individual plants, Double-click on them.

By using a combination of the many tools available with **Punch! Super Home Suite** you can create beautiful landscapes, like this:





NOTE

To place an Object on top of another Object, like a toaster on a counter or a lamp on a table, use the **Elevate Object** command. This command is easily accessed by Right-clicking on the Object itself.

OBJECTS TOOL

When the **Objects Tool** is selected, previews of the available options will appear in the Preview Bar. To change the Preview Library, click on the word Objects above the Previews.

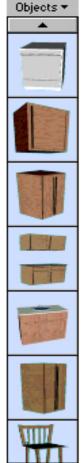
Punch! Super Home Suite includes hundreds of pre-drawn objects. You can Drag & Drop these objects into your 2D design window.

If you want to change the finish on the cabinets, you can Drag & Drop any **Texture** or **Color** onto them in **Punch! LiveView**.

You can further customize any of these objects with **Punch! 3D Furniture Workshop** (see Chapter 9). Double-click on any **Object** and this will automatically launch **Punch! 3D Furniture Workshop** or Right-click on the object you with to customize and select **3D Furniture Workshop**.









Chapter five MENU BARS

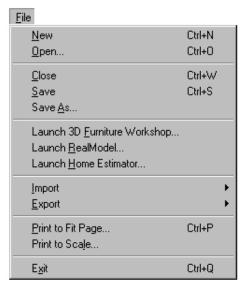
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THE FILE MENU

The commands under the **File Menu** are those that allow file creation; opening, closing, importing and exporting files; saving files; printing features and launching the supporting programs.

New (Ctrl+N) opens a new, untitled window. **Open** (Ctrl+O) displays the Open dialog box, which lets you open an existing floorplan. **Close** (Ctrl+W) closes the active window.

Save (Ctrl+S) saves the changes you have made since opening your drawing. If you began a new drawing, this command



will display the "Save As" Dialogue box and you will be prompted to give your drawing a name. **Save As...** allows you to save your drawing at various stages of completion. This command is especially useful if you wish to "try out" different room or landscaping ideas.



Launch 3D Furniture Workshop opens a new Punch! 3D Furniture Workshop window. 3D Furniture Workshop is a powerful CAD program that allows you to create your own furniture or edit the existing furniture objects. You may also open 3D Furniture Workshop by clicking on the icon in the lower right of your window.



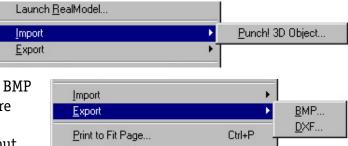
Launch RealModel opens **Punch! RealModel** and loads the currently open drawing. **Punch! RealModel**® (patent-pending) is a program that allows you to construct an actual scale model of your dream home.



Launch Home Estimator opens **Punch! Home Estimator** worksheet and calculates the materials used in the currently open drawing in an editable format.

Import allows you to import your custom-designed furniture and fixtures from **3D Furniture Workshop**. **Export** allows you to export the contents of

your **Punch! LiveView** window in either BMP or DXF format. Choose the directory where you wish to save the image, The default directory is the "My Documents" folder, but



you can save the image in another directory if you prefer. The BMP file can be printed using MS Paint.

Print to Fit Page (Ctrl+P) displays the Print dialogue box. You will have a choice of which printer to use and how many copies of your drawing you wish to print. **Print to Scale** prints your 2D floorplan in the scale that you have chosen.

Exit closes the **Punch! Super Home Suite** program. You will be prompted to save your work.

THE EDIT MENU

Commands contained under the **Edit Menu** are those that allow alterations to items that you have drawn. It contains the standard Windows commands, in addition to **Punch! Super Home Suite** specific commands.

Undo remembers the last step that was taken and allows you to erase it. Once you have used the Undo command you have the option of "Redoing" the change. Undo is not available for every action.

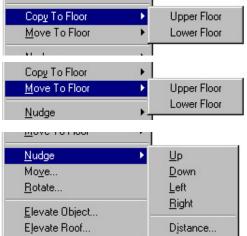
Cut (Ctrl+X) removes the selected item(s) to the Clipboard. Cut is unavailable if nothing is selected. **Copy** (Ctrl+C) places a duplicate of the selected item(s) on the Clipboard. Copy leaves the original in place. Copy is unavailable if nothing is selected. **Paste** (Ctrl+V) places the contents of the Clipboard into your drawing. You may place the

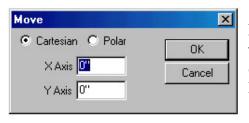
Clipboard contents as many times as you wish. This command is unavailable if the Clipboard is empty.

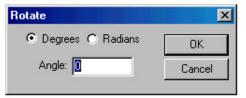
Clear (Delete) removes the selected item(s) from your drawing. The item is not stored on the Clipboard and its action cannot be undone.

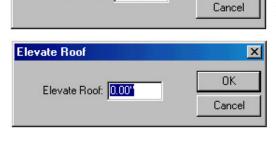


Select All (Ctrl+A) will select every item on the currently active floor.









X

0K

Copy To Floor allows you to place a duplicate of the selected object(s) on a different floor. Like the copy command, it leaves the original in place.

Move To Floor allows you to relocate selected object(s) to a different floor. Like the cut command, it does not leave the original in place.

Nudge allows you to move objects in definable increments. The Up, Down, Left and Right selections can also be activated by the arrow keys on your keyboard. Through the **Distance** dialogue box, distances as small as 1 inch may be defined.

Move allows for a very precise placement. A dialogue box will be displayed asking you to specify how far you wish to move the selected object(s) and by which method. The **Cartesian** method uses the X and Y coordinates for definition and the **Polar** method uses Distance and Angle to specify the move.

Rotate will display a dialogue box asking you to specify the angle of rotation and the method. The object rotates on its center.

Use the **Elevate Object** command when you need to "lift" something onto a table or raise the floor on your new deck. Elevation is measured in inches and you may enter a negative number by adding the minus sign (-) if you wish to lower the object. The **Elevate Roof** command is especially useful when you decide to add a second floor after drawing the roof. Elevation is measured in inches and you may enter a negative number by adding a minus sign (-) to lower the roof.

Elevate Object

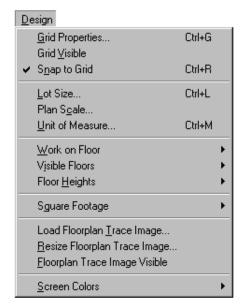
Elevate Object: 0.00"

THE DESIGN MENU

The commands available through the **Design Menu** give you control of your floorplan environment. From the scale at which you are drawing, to ceiling height, to defining a custom background color.

The **Grid Properties** (Ctrl+G) option is available to give you more control over your drawing. By default, the grid is set at twelve inches; this way you can visualize that each square on the floorplan is 1 square foot. By defining a customized **Grid**, you can design to fit your specific needs.

You may choose to define a different **Grid Spacing** or a smaller **Snap Grid** for more precise drawing. The choices for **Grid Style** are dots or lines, depending on your preference. **Grid Visible** toggles the grid on and off.



The **Snap to Grid** (Ctrl+R) option lets you quickly align items. When **Snap to Grid** is checked and you Drag & Drop an object, the object aligns automatically with the grid. By default, **Snap to Grid** is checked. The snap to distance is specified in the **Grid Spacing** field of the **Grid Properties** dialogue box.

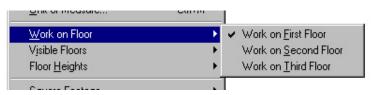
The **Lot Size** (Ctrl+L) option allows you to define a "virtual lot" that more closely resembles your "physical lot". You may use either feet or meters as your unit of measure.

Punch! Super Home Suite creates an actual scale drawing of your floorplan. The default **Plan Scale** is 1/3"=1', which means that 1/3 inch on your design equals one foot in the real world. When you print out your floorplan, using the **Print to Scale** option, it will also be at the chosen scale.

Unit of Measure. You may choose to work using **English** (feet and inches) or **Metric** (meters and centimeters) measurements.



To draw a lot which is not rectangular (a cul de sac, for example), set the dimensions at your lot's largest point, then use the **CAD Tool** to draw the irregular edges



The **Work on Floor** option allows you to choose between the **First Floor, Second Floor** or **Third Floor.** Both the 2D and 3D views will be affected by this choice. As you switch

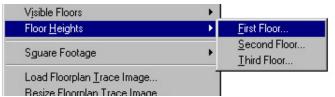


between floors, you can always keep track of which one is active by the little house in the lower left corner. You can also change working floors by clicking on the little house and selecting from the menu.



The **Visible Floors** option allows you to display either the floor currently under construction or all

floors of your design. Both the 2D and 3D views will be affected by this choice.



The **Floor Heights** option allows you to set custom ceiling heights for each floor of your design. You may define the **First Floor, Second Floor** and **Third Floor** independently of each other. The default

ceiling height is 96 inches (8 feet).

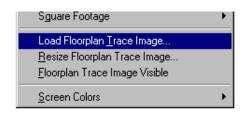


Second Floor Square Footage Third Floor Square Footage Eirst Floor Square Footage
Second Floor Square Footage
Third Floor Square Footage

The **Square Footage** option allows you to calculate the square footage of each floor in

your design. It can be accessed from the Design drop-down menu or by clicking on the icon at the bottom of your screen.

Floorplan Trace is a powerful tool that will get you started fast; it lets you easily scan, load and trace existing plans. Load Floorplan Trace Image... allows you to import a scanned .bmp file into the background of your design. Resize Floorplan Trace Image... allows you to match the scale of your design window. Floorplan Trace **Image Visible** toggles the image on and off.



When you select **Screen Colors**, you will have the option of changing the color for the Working Floor,

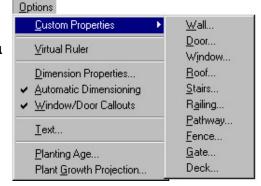


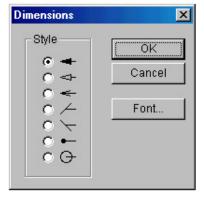
which floor is currently active. The Working Floor Color default is white, the **Inactive Floor Color** default is dark blue, and the **Background Color** default is blue. The colors you define will remain with the program until you assign new colors or use the **Reset Colors** feature which sets all custom colors back to the program-defined defaults.

THE OPTIONS MENU

The commands available through the Options Menu allow further customization of the drawing environment.

Custom Properties: To further personalize your dream home, virtually every tool has custom settings. See Chapter 4 for the full description of each tool's custom properties.





Use the Virtual Ruler when you wish to figure measurements that are not automatically generated. Toggle the Virtual Ruler on and off via the icon at the bottom left of your screen.



By selecting **Dimension Properties**, you have the option of changing the endpoints of the measurements drawn with the Dimension Tool to suit your needs. This option only changes the endpoints.

Bold Italio

Sample

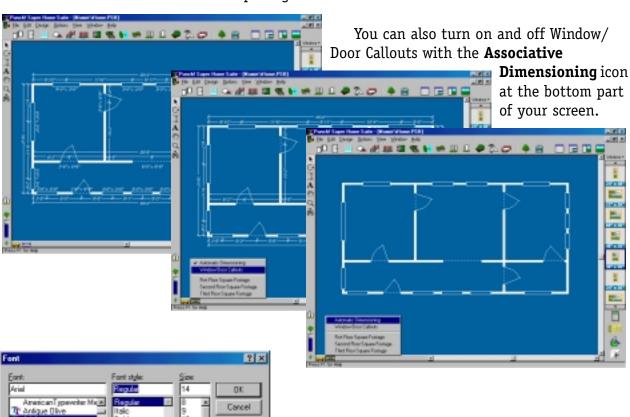
w'estem

AaBbYyZz



When the **Automatic Dimensioning** option is selected, all items will be shown with their measurements. You can also turn on and off **Automatic Dimensioning** with the **Associative Dimensioning** icon at the bottom part of your screen.

When the **Window/Door Callouts** option is checked, the measurements of all window and door openings will be added to the wall measurements.



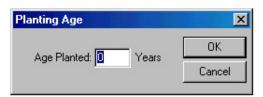
When selected, the **Text** option will display a dialogue box where you can select the font, style and size of the **Text** that you use to label your floorplan. When you change the display font, all text in your drawing will be updated.

Planting Age. When you are landscaping your dream home, you have the option of deciding what age the plants will be when they are transplanted into your landscape. Unless otherwise specified, all plants are 0 years (seedlings). The maximum age that can be entered into this dialogue box is 20 years.

The **Plant Growth Projection**

dialogue box allows you to specify the maximum growing age (in years) for the plants you choose for your landscape.







NOTE

You can define the **Planting Age** for each individual plant to further customize your landscape.

The default is 20 years. The minimum is 3 months and the maximum is 50 years.

THE VIEW MENU

The View Menu contains selections which change the way your drawing is displayed in the **Punch! LiveView** window.

Reset Floor Plan (Ctrl+E) returns the floorplan to the center of the window and to 60% of actual size. When Set Plan View Zoom is selected, a window is displayed that allows you to choose how large your 2D floorplan is displayed. Reset 3D View returns the 3D plan view in the LiveView window to the default setting.

3D Framing Phase and **3D Completion Phase** are two ways to view your drawing in the LiveView window.







Render 3D Final Quality. You may choose to view your home in Final Quality at any time. Your home will be displayed in the LiveView window with a much sharper appearance.

3D Final Quality. Allows you to control the speed at which **Punch! Super Home Suite** renders your drawing.

3D Viewing Method allows you to control how you move through your design. In addition to this menu, you

design. In addition to this menu, you can control elevation by holding the right-mouse button down.

Render 3D Final Quality

3D Final Quality

3D Viewing Method
Hide Doors in 3D View

3D Lighting...
3D Shadows

3D Final Quality

3D Viewing Method

Hide Doors in 3D View

3D Lighting...

3D Shadows

Walk-Through

Walk-Through

Fly-Around

Fly-Around Altitude...

Ctrl+H

Hide Doors in 3D View allows you to choose whether your floorplan

SLOW CLASSICS THEN PROVIDE A STATE OF THE PRO



renders with or without doors in the **Punch! LiveView** window. It is especially useful in smaller rooms, where the door might obscure much of the viewing space.

3D Lighting allows you to control how the shadows fall in your design. Select the direction you wish the light to come from and how bright you wish the light to appear.

3D Shadows allows you to include rendered shadows in your LiveView window.

Refresh enables you to redraw the screen and refresh the design information in your drawing.





You can interrup any rendering at any time with a click of the mouse. You do not have to wait until a render is completed to continue drawing.

THE WINDOW MENU

The **Window Menu** contains the controls for **Punch! LiveView**, the different viewing methods and the open file list.

The **Punch! LiveView** window allows you to see what your design looks like in 3D. You can move through your design with either the **Walk-Thru Tool** or the **Fly-Around Tool**.

It is in the **Punch! LiveView** window that you apply textures and colors and watch your Landscape grow!

Plan Full View. The default is **Plan Full View.** When you load **Punch! Super Home Suite**, this is the view you will see.





3D Quarter View allows you to use most of your screen for drawing, yet be able to view your design in 3D.



Split Plan/3D View allows you to focus primarily on your 3D actions while maintaining a clear view of the 2D design.



3D Full View is primarily for detail design like the application of Textures or **Colors**. You will also find this a useful view when you are Landscaping your yard. You will easily see everything from every angle.



Open Window Listing will display a listing of all open drawings.

THE HELP MENU

Contents... [F1] displays the on-line Help File.

Search... allows you to search for a specific topic in the Help File.

Using Help... explains how to use Help.

About Punch! Super Home Suite displays the program's splash screen.



Chapter six

LIVEVIEW[™] ENVIRONMENT

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VIEWPOINT DIRECTION ARROWS

PUNCH! LIVEVIEW SIZE OPTIONS

WALK-THROUGH TOOL



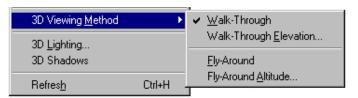
The **Walk-Through Tool** is one mode of navigating in 3D around your house. In the **Punch! LiveView** window, simply move the mouse where you wish to "walk". The greater the movement of the mouse, the faster the pace. The elevation may also be changed by selecting **3D Viewing Method> Walk-Through Elevation...** under the **View** menu. To change the elevation of the view in **Walk-Through** mode, hold the right mouse button down.

FLY-AROUND TOOL



The **Fly-Around Tool** is another way to move directly through your 3D design. The left mouse button controls up, down, left and right movement, while the right mouse button zooms in and out for a close-up or bird's eye view. The altitude may also be changed by selecting **3D Viewing Method>Fly-Around Altitude...** under the **View** menu.

In addition to the icons, these options are available through the **View Menu**. By selecting **3D Viewing Method**, you may



choose between Walk-Through or Fly-Around mode and specify at what elevation or altitude you want to work.

Textures *

APPLYING TEXTURES & COLORS

Punch! Super Home Suite provides the tools to apply a wide variety of **Textures** and **Colors** to customize your design. The only requirement for applying them is that you are working in a **Punch! LiveView** window.

To begin customizing your design, select the **Texture** or **Color**

Tool. You'll notice that when the **Texture** or **Color Tool** is selected, previews of their respective available options will appear in the Preview Bar. To change the Preview Library, click on the word **Textures** or **Colors** above the previews.

Once you have selected the **Texture** you desire, Drag & Drop it onto the area of your design where you wish the **Texture** to appear.

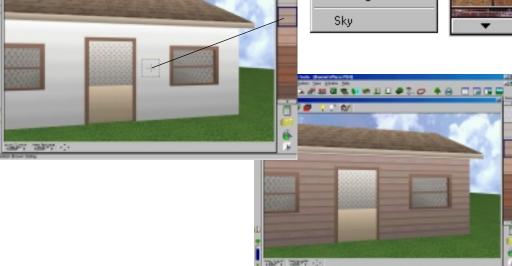








To apply the same texture or color to several surfaces, Right-click on the desired **Texture** or **Color**, then Right-click on each surface where you wish it to appear. End this application with a Left-click.



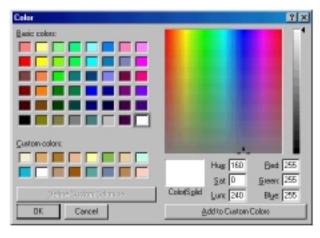
Plus, you're in no way limited to the **Colors** in the Preview Window. If you Double-click on any color, you will be presented with the **Color Palatte**. With this palatte you are able to duplicate any color scheme you wish.

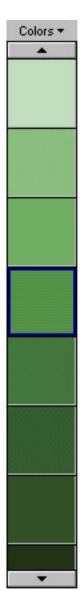
You can define a color several ways:

- 1. By clicking anywhere in the color matrix.
- 2. By moving the slider along the right of the matrix.
- 3. By entering **Hue/Sat/Lum** values. The **Hue** is controlled by moving the pointer horizontally in the matrix, the **saturation** is controlled by moving the pointer vertically, and the **luminosity** is controlled by the slider at the right.
 - 4. By entering **Red/Green/Blue** values.

As you experiment with these values the color will be shown in the **Color|Solid** box. When you have defined the color you desire, click **Add to Custom Colors** to store it in your document.







LIGHTING & SHADOWS

The **Lighting Icon** allows you to change the direction, intensity and brightness of the lighting rendered in LiveView.



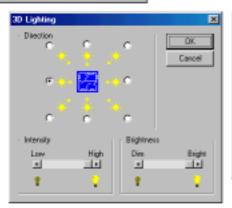
The **Shadows Icon** allows you to switch on and off the shadows in your rendering.



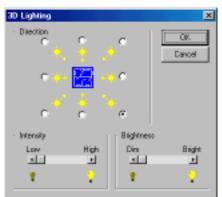








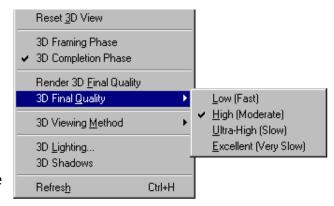






Although the Photorealism of **Punch! Super Home Suite** is excellent at the default level, you can make it even sharper.

By changing the settings in the **View>3D Final Quality** menu, you can control the smoothness of the renderings displayed in the





LiveView window. You can view your home at the 3D Final Quality setting at any time by clicking on the **Render Now Icon**.



The higher the quality setting, the slower your drawing will render. But, you can interrupt rendering at any time with a click of the mouse. You do not have to wait until a render is completed to continue drawing.





VIEWING SPEED

The **Viewing Speed** option allows you to control the speed at which you move through your drawing.



At the slowest speed, all textures will render accurately as you move around in the **LiveView** window. As you set the speed to the faster settings, the textures degrade as you move around. They will accurately render again once you stop moving.

CAMERA ANGLE

The **Camera Angle** allows you to control the Field of Vision displayed in LiveView. If you wish to see more of a small room, for example, set the field to the widest setting. Narrow it again by clicking on the arrow under the word "Thin".





Normal View



Thinnest Setting



Widest Setting

VIEWPOINT DIRECTION ARROWS

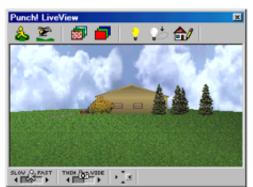


These arrows allow you to quickly view your drawing from each edge of your lot.





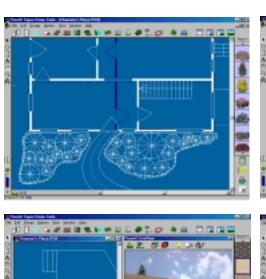




PUNCH! LIVEVIEW SIZE OPTIONS

The default is **Plan Full View.** When you load **Punch! Super Home Suite**, this is the view you will see. The **3D Quarter View** option allows you to use most of your screen for drawing, yet be able to view your design in 3D.

When you wish to focus primarily on your 2D actions while maintaining a clear view of the 3D design, select **Split Plan/3D View**. Then, when you're ready to add textures and colors to your Dream Home it will be easier in the **3D Full View** mode.









Chapter seven FLOORPLAN TRACE & AUTOFRAMING

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INTRODUCING FLOORPLAN TRACE

Punch! Super Home Suite makes it easy for you to transfer those plans you have on paper to your computer.

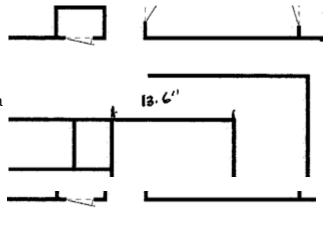
Simply scan your plan and save it in BMP format. Then load it into **Punch!**Super Home Suite and trace it!

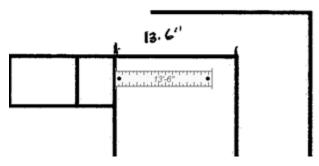
MATCHING THE DRAWING SCALE

Find a wall section, or some other item in the scanned image with a known length.

Example: Zoom in and find a wall with a known length in the scanned image.

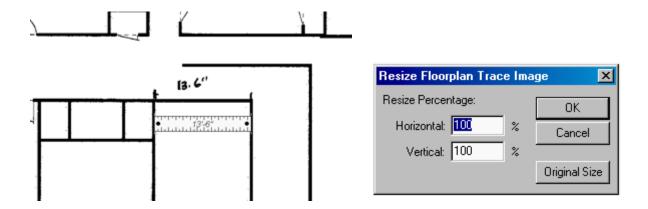
Select the Virtual Ruler. Set it parallel to the wall segment where you know the length.







Set the Virtual Ruler to the same length as the wall you wish to match.



Choose **Resize Floorplan Trace Image** (under the Design menu) to open the resize dialog box.

Set the values in the Horizontal and Vertical boxes to reduce or enlarge the traced drawing.

TIPS FOR USING FLOORPLAN TRACE

- Zoom in and out as necessary to make it easier to see and trace over the bitmapped lines.
- Changing the color of the walls you are tracing may make them easier to see. For example, use red to trace, instead of black.
- At times it may be easier to turn off the image you are tracing. This will be especially useful when you are working on a very complex part of your floorplan.
- You may find it useful to set the Snap Grids to "Off".

AUTOFRAMING

View rough-in framing at any time during the design process. See complex stairs, roof trusses, headers and more. **AutoFraming** works in conjunction with **Home Estimator** to track expenses and keep you on budget.









Switch between **Completion Phase** and **Framing Phase** with the icons in the lower right of your screen.

Chapter eight HOME ESTIMATOR

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INTRODUCING HOME ESTIMATOR

Home Estimator continually and automatically tallies your expenses and building materials as you design your home. It produces a handy spreadsheetstyle report which can be exported, edited and printed.

You input the labor and material costs for your area and Home Estimator does the rest.



Launch **Home Estimator** by selecting **Launch Home Estimator** under the File Menu or by clicking on the **Home Estimator** icon in the lower right portion of your screen.

USING HOME ESTIMATOR

Home Estimator automatically tracks and calculates measurements, areas, and objects as you work. These components are then compiled into an editable spreadsheet-based schedule. The spreadsheet can be modified, exported, and saved as a Microsoft Excel file (.xls).

Icon Overview



0pen



□ Save



🞒 🛮 Print



Insert Row/Column



Delete Row/Column



A Font

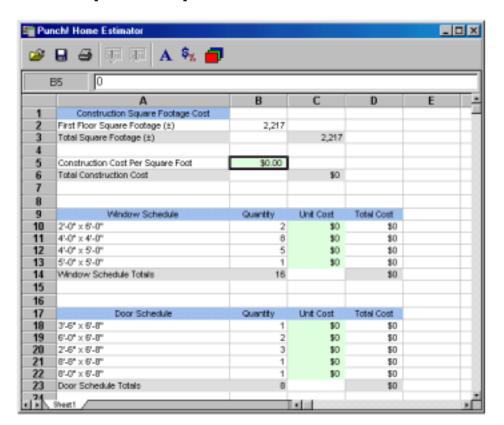


Format Cell



Background Color/Pattern

Cells which are shaded in green signify cells where you will enter your actual local prices of components.





Prices may be higher during the peak building season and may depend on the part of the country where you are building your new home. You will get this number from your local contractor.

CONSTRUCTION SOUARE FOOTAGE COST

Punch! Super Home Suite will automatically calculate the total square footage for each floor of your design. The *Construction Cost Per Square Foot* will be dependent upon a few variables specific to your area.

WINDOW SCHEDULE

Home Estimator also keeps track of all the sizes of windows in your design. The costs for the windows can be obtained from a local building supply company

DOOR SCHEDULE

Punch! Super Home Suite will keep track of the sizes of doors you use in your design. The costs for the doors can be obtained from a local building supply company.

FRAMING STUD SCHEDULE

The program default is 2"x4" studs. You have the ability to change this to 2"x6" or whatever size studs you prefer to use.

The height will be the ceiling height of the room. If you have multiple ceiling heights, you will have multiple lengths of study to enter.

The cost of this lumber can be obtained at your local lumber yard.

WINDOW/DOOR HEADER SCHEDULE

Along with the actual windows and doors, you will need to price the lumber for **Window & Door Headers**. This cost can be obtained at your local lumber yard.

ROOFING COST

The total square footage of your roof will be calculated by **Punch! Super Home Suite.** You will get this cost from your building contractor.

ROOF TRUSS SCHEDULE

The program will compile a list of all **Roof Trusses** necessary as well as specifying the span and pitch. It will also notate which will be used for cathedral and which will be used for flat ceilings.

LANDSCAPE LOT COST

Punch! Super Home Suite will calculate the total square footage of your landscape lot. This figure will help you estimate the total sod requirements, etc. The total square footage does not include the footprint of the house.

LANDSCAPE PLANT SCHEDULE

Home Estimator will list the plants you use in your landscape. It will also list the age of these plants at planting time.

Chapter nine

CUNTENTE

RealModel®

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REALMODEL INTRODUCTION

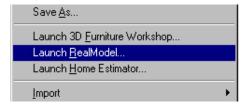
Punch! Super Home Suite integrates the exclusive, patented **RealModel*** technology that allows you to construct an actual scale model of any home you can draw.

Materials Needed for Construction:

- Construction material foam board or poster board
- · Adhesive spray adhesive, rubber cement, or glue stick, etc.
- Tape
- Straight pins
- Straight-edge ruler
- · Artist's knife or scalpel



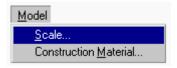
Launch RealModel by clicking on the RealModel icon in the lower right portion of your screen or by selecting Launch RealModel under the File menu.

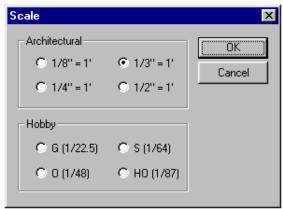


CHOOSING A SCALE AND CONSTRUCTION MATERIAL FOR YOUR REAL MODEL

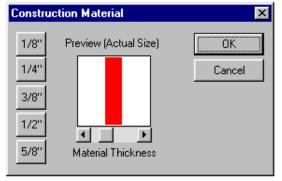
With the **RealModel** program window open, select the **Scale** option from the **Model** menu.

The **Scale Dialog** will be displayed. Select the button corresponding to the desired print scale. All model templates will print in this scale. For example, if you choose 1/2"=1' - a ten-foot wall will print as a five-inch template, etc.





Then select the **Construction Material...** option from the **Model** menu.





In the **Construction**

Material dialogue box, select the button corresponding to the thickness of the material you will use to construct your model. Make sure the floorplan walls are the same thickness as your material.

OPTIMIZING YOUR PRINTER SETTINGS FOR REALMODEL

These settings are printer-dependent. The examples here show a laser printer, but these settings are typical of many popular color ink jet printers.

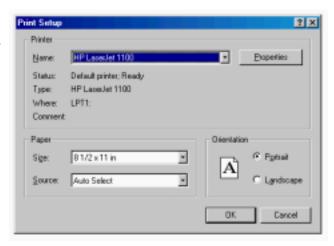
When you select any of the print functions, you will see the **Print Setup** dialog box. The settings that appear will be printer-dependent. But most printer will have settings similar to those displayed below.

When you click on the **Properties** button, the **Printer Properties**

dialogues will be displayed. The specifics of this dialogue box will vary from printer to printer. For specific questions, please consult your printer documentation.

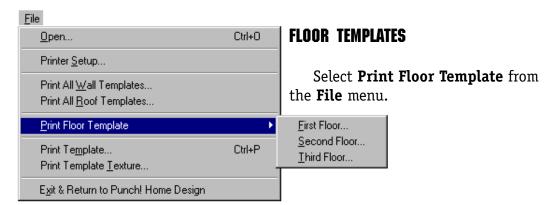
Selecting **Draft** or **Economy Mode** will speed up the printing process, but some quality will be sacrificed. Use these settings when you are experimenting with your design.

When you are ready to print the final copy that will be used in the construction of your **RealModel**, use the **Final** or **Best** setting.

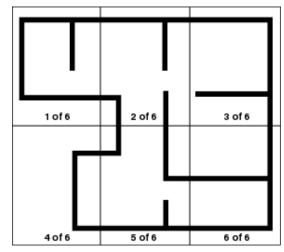


The following templates will be needed to construct your **RealModel**. All templates are numbered and labeled at the attachment points.

- Floor Templates (labeled by floor for multi-story designs)
- · Wall Templates
- · Roof Templates
- · Texture Templates



In the submenu specify which floor you wish to print. Specify your printer selection and click OK. Your floor plan will print in sections, with directions for placing the floor plan together printed at the bottom of each page. Tape these pages together to create the **Floor Template** which will be affixed to your **Construction Material**.

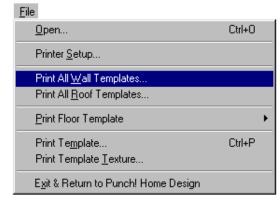


WALL TEMPLATES

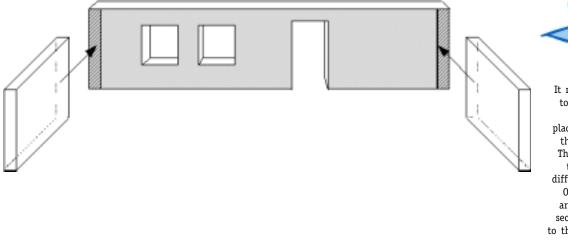
Select **Print All Wall Templates** from the **File** menu.

Specify your printer selections and click OK.

The directions for connecting the walls will print on each page. You will note on some of the walls shaded area(s) will appear at the ends of the wall. Cut out each wall section from your construction material to the exact size of the template including the shaded areas. The shaded areas will be the



thickness of your construction material and are the location where the templates attach.



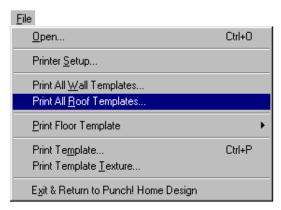
It may be easier to connect the walls before placing them on the floor plan. This allows you to work from different angles. Once the walls are connected, secure the walls to the floor plan. You can temporarily affix the walls to each other and to the floor plan with straight pins.

ROOF TEMPLATES

Select **Print All Roof Templates** from the **File** menu.

Specify your printer selections and click OK.

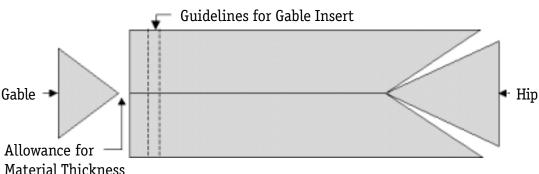
Although your **Roof Templates** may print attached at points, cut out each roof section separately from your construction material to the exact size of the template. Once the roof is connected together, secure the roof to the walls.



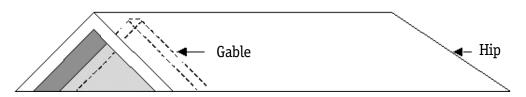


There will be a space between the Roof sections — this is an allowance for the thickness of the Construction Material.

2D ROOF TEMPLATE



3D ROOF CONSTRUCTION



TEXTURE TEMPLATES

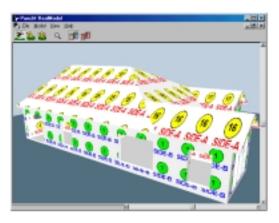
There are only two steps to follow for each texture, but you will need to take your time with this section. Use the **Fly-Around Tool** to view your drawing from all angles and to make sure all template textures are printed.



STEP 1.

Decide which **Texture Template** matches which wall or roof. Display your drawing using the **Render Textures & Colors** tool.

For this example, let's print this section of the roof.

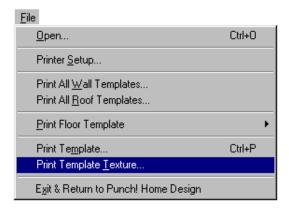


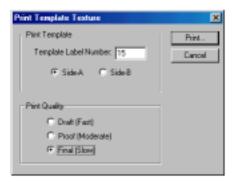


STEP 2.

Switch views by selecting the **Render Template Labels** tool. The roof section is template #15, Side-A

Once you have chosen the template you wish to print, select **Print Template Textures...** from the **File** menu.





Enter the template number and specify A or B side. Set the preferred **Print Quality**. The Proof quality provides a good preview at a moderate printing speed. Use **Final** quality for actual model construction. Click "Print..." to proceed.

Follow these two steps for each wall and roof texture on your model.

Many times it is best to print and assemble each texture before moving on to the next texture section. But, if you choose to print all textures prior to construction, it is wise to label them with the name/number.

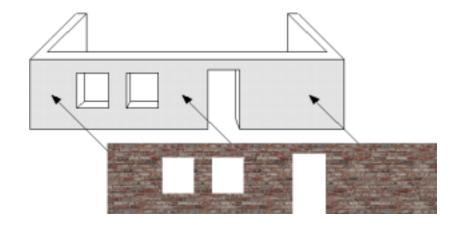
APPLYING THE TEXTURE TO THE MODEL

Once you have printed out all the textures, you are ready to apply them to your model.

- 1. Cut-out the printed template texture including the blank regions signifying the windows and doors. If the texture "tiled"* across multiple pages, glue or tape the sections together to create a continuous template texture.
- 2. Attach the texture to the proper side (A or B) of the matching construction material piece which was created when you previously applied the Wall or Roof Templates. The texture can be attached to the construction material using spray-adhesive, glue stick or tape. (The use of white glue for this step may cause the paper to wrinkle.)

*Tiling is the term used when an image that is too large to fit on the selected paper size is printed across several sheets of paper.

To minimize paper waste you may want to select the "Landscape" setting on your Printer Setup Menu.



NOTE:

To minimize paper use, print these textures on the "Landscape" option on your printer.

BUILDING YOUR REALMODEL® - REVIEW

- 1. Complete your design in **Punch! Super Home Suite**.
- 2. Launch RealModel®
- 3. Set the **Scale** and then select **Construction Material** from the **Model** menu. In this dialog box, select the width of the material you have chosen to use for the construction of your **RealModel**[®]. It is very important that you choose the appropriate thickness of the material, the templates are printed to fit the thickness you specify.
- 4. Select the **Print Floor Template** option from the **File** menu. Print the Floor Templates and assemble them according to their numbering; i.e., each numbered wall will match to the corresponding wall. The Base Template note at the bottom of each page will indicate the number of pages remaining to complete the Floorplan template. You should use a sturdy construction material for the base.
- 5. Select the **Print All Wall Templates** option from the **File** menu. Print the Wall Templates and assemble them according to their numbers. Match the Wall numbers to the numbers on the Floor Template.
- 6. Select the **Print All Roof Templates** option from the **File** menu. Print the Roof Templates and assemble them as they appear in your design.
- 7. Select the **Print Template Textures** option from the **File** menu. Print the Textures and assemble them according to their numbers. Match the Texture numbers to the numbers on the Wall Template.

Chapter ten

3D FURNITURE WORKSHOP™

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3D FURNITURE WORKSHOP™ INTRODUCTION

Punch! Super Home Suite provides a powerful 3D Furniture Workshop program that allows you to create your own furniture or edit the existing furniture objects.



You can launch **3D Furniture Workshop** by clicking on the 3D Furniture Workshop icon in the lower right-hand portion of your screen or by selecting **Launch 3D Furniture Workshop** from the **File** menu.

DRAWING TOOLS OVERVIEW



2D/3D RECTANGLE

The **2D/3D Rectangle Tool** allows you to draw squares and rectangles. Click on the tool and Click & Drag in the design window to the shape you need. If you have selected the 3D tool, you will be able to extrude your shape to add height.





2D/3D ELLIPSE

The **2D/3D Ellipse Tool** allows you to draw circles and ovals. Click on the tool and Click & Drag in the design window to the shape you need. If you have selected the 3D tool, you will be able to extrude your shape to add height.





2D/3D MULTIGON

The **2D/3D Multigon Tool** allows you to draw objects with a specific numer of equal sides. You specify the number of sides by going to **Options>Custom Options**. Click on the tool and Click & Drag in the design window to the shape you need. If you have selected the 3D tool, you will be able to extrude your shape to add height.





2D/3D POLYGON

The **2D/3D Polygon Tool** allows you to draw an object with any number of sides. Polygons may be open or closed objects. Click on the tool and with a series of clicks, draw the shape you need. Double-click to set the last point. If you have selected the 3D tool, you will be able to extrude your shape to add height.





2D/3D CLOSED ARC

The **2D/3D Closed Arc Tool** allows you to draw elliptical arcs which automatically close along the bottom. Click on the tool and Click & Drag in the design window to the shape you need. To constrain the shape, hold the Shift key down. If you have selected the 3D tool, you will be able to extrude your shape to add height.





2D/3D CIRCULAR CLOSED ARC

The **2D/3D Circular Closed Arc Tool** allows you to draw shapes from full circles to thin pie-shaped objects. Click on the tool and Click & Drag in the design window to the shape you need. Release the Mouse button, then move the Mouse up or down to define the area. End with a Left Click. If you have selected the 3D tool, you will be able to extrude your shape to add height.





2D/3D OPEN ARC

The **2D/3D Open Arc Tool** allows you to draw elliptical arcs which remain open. Click on the tool and Click & Drag in the design window to the shape you need. To constrain the shape, hold the Shift key down. If you have selected the 3D tool, you will be able to extrude your shape to add height.





2D/3D CIRCULAR ARC

The **2D/3D Circular Arc Tool** allows you to draw shapes from full circles to thin pie-shaped objects which remain open. Click on the tool and Click & Drag in the design window to the shape you need. Release the Mouse button, then move the Mouse up or down to define the area. End with a Left Click. If you have selected the 3D tool, you will be able to extrude your shape to add height.





2D LINE/3D PLANE

The **2D Line/3D Plane Tool** allows you to draw straight lines and flat planes of any length. Click on the tool and Click & Drag in the design window to the length you need. To constrain your line to horizontal or vertical, hold down the Shift key. If you have selected the 3D tool, you will be able to extrude your shape to add height.





2D CURVE/3D SURFACE

The **2D Curve/3D Surface Tool** allows you to draw curves of any shape. Click on the tool and with a series of clicks, draw the shape you need. The curve will be smoothed when you finish. Double-click to set the last point. If you have selected the 3D tool, you will be able to extrude your shape to add height.

CUSTOMIZING TOOLS OVERVIEW



TEXTURES

The **Textures Tool** allows you to add textures like woodgrain, brick, fabric, concrete, etc. to the object you are drawing. Drag & Drop textures from the Preview Bar. Change the texture category by clicking on the word **Textures** above the previews.



COLORS

The **Colors Tool** allows you to apply colors of your choice to the object you are drawing. Drag & Drop colors from the Preview Bar. Change the color category by clicking on the word **Colors** above the previews.



OBJECTS

The **Objects Tool** allows you to select from the library which object you wish to edit. Change the object category by clicking on the word **Objects** above the previews. Drag & Drop the desired object into the design window.

DRAWING GRID OVERVIEW



FRONT GRID

The **Front Grid Icon** sets the Front Grid active and allows you to draw on the X and Y axis. You can tell that the Front Grid is active when it has the tighter grid pattern.



FLOOR GRID

The **Floor Grid Icon** sets the Floor Grid active and allows you to draw on the X and Z axis. You can tell that the Floor Grid is active when it has the tighter grid pattern.



SIDE GRID

The **Side Grid Icon** sets the Side Grid active and allows you to draw on the Z and Y axis. You can tell that the Side Grid is active when it has the tighter grid pattern.

PROGRAM TOOLS OVERVIEW



POINTER

The **Pointer Tool** is used to select, move and resize items. You may select multiple objects by holding the Shift key down while clicking on the desired set of objects.



RNTATE

The **Rotate Tool** is used to rotate objects or sets of objects. The direction of rotation is dependent upon which grid is active. Select the object then select the **Rotate Tool**, Click on the object and move the mouse in a clockwise or a counter-clockwise direction until it is in the position you need.



SKEW

The **Skew Tool** is used to slant objects. The direction of skew is dependent upon which grid is active. Select the object then select the **Skew Tool**, Click on the object and move the mouse in the direction you wish to slant the object until it is in the position you need.



EXTRUDE

The **Extrude Tool** is used to add or change a dimension of a 2D object. The direction the object extrudes is dependent upon which grid is active. Select the object then select the **Extrude Tool**, Click on the object and move the mouse in the direction you wish to extrude the object until it is in the shape you need.



PAN

The **Pan Tool** makes it easy to reposition your object in the design window. When the **Pan Tool** is selected your cursor changes to a hand. Place the cursor anywhere on your design, then Click & Drag the object to its new position.



ZOOM

The **Zoom Tool** allows you to get a close-up view of your drawing or zoom out to view the complete object. To enlarge the view, hold down the left mouse button while moving the mouse up. To reduce the view, hold down the left mouse button while moving the mouse down.



FLY-AROUND

The **Fly-Around Tool** is used to easily view your design from a variety of angles. Hold down the left mouse button while you move the mouse to change the position from which you view the object.



DRAW FROM CORNER/DRAW FROM CENTER

The **Draw From Center/Draw From Corner Toggle Switch** changes the beginning points of objects drawn with the drawing tools.





OBJECT EDITING/POINT EDITING

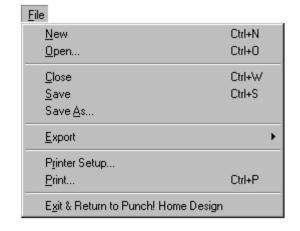
The **Object Editing/Point Editing Toggle Switch** alters how your edits impact your object. If you are in **Object Editing mode**, changes will be effective on the object as a whole. If you are working in **Point Editing mode**, each point of the object is able to be treated separately.

THE FILE MENU

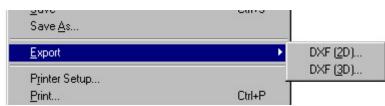
The commands under the **File Menu** are those that allow file creation; opening, closing and exporting files; saving files and printing features.

New (Ctrl+N) opens a new, untitled window. Open (Ctrl+0) displays the Open dialog box, which lets you open an existing Object. Close (Ctrl+W) closes the active window.

Save (Ctrl+S) saves the changes you have made since opening your drawing. If you began a new drawing, this command will display the "Save As" dialogue box and you will be prompted to give your drawing a name. **Save As...** allows



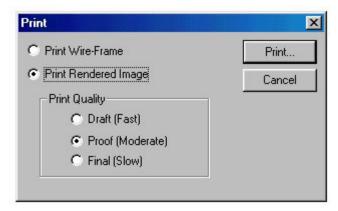
you to save your drawing at various stages of completion.

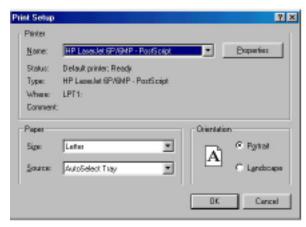


Export allows you to export your drawing in either 2D or 3D DXF format. Choose the directory where you wish to save the image, The default directory is the "My

Documents" folder, but you can save the image in another directory if you prefer.

Print Setup displays a Print Setup dialogue box. You will have a choice of which printer to use and how many copies of your drawing you wish to print.





Print (Ctrl+P) displays the Print dialogue box. You will have a choice of **Wire Frame**

or **Rendered Image** and if you select **Rendered Image**, you have the selection of **Print Quality**.

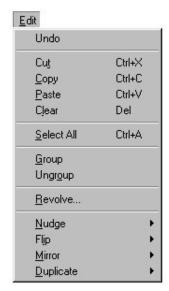
Exit and Return to Punch! Super Home Suite ... will ask you if you wish to place the Object you have drawn or edited in **Punch! Super Home Suite**.

THE EDIT MENU

Commands contained under the **Edit Menu** are those that allow alterations to items that you have drawn. It contains the standard Windows commands, in addition to **Punch! 3D Furniture Workshop** specific commands.

Undo remembers the last step that was taken and allows you to erase it. Once you have used the Undo command you have the option of "Redoing" the change. Undo is not available for every action.

Cut (Ctrl+X) removes the selected item(s) to the Clipboard. Cut is unavailable if nothing is selected. **Copy** (Ctrl+C) places a duplicate of the selected item(s) on the Clipboard. Copy leaves the original in place. Copy is unavailable if nothing is selected. **Paste** (Ctrl+V) places the contents of the Clipboard into your drawing. You may place the Clipboard contents as many times as you wish. This command is unavailable if the Clipboard is empty.



Clear (Delete) removes the selected item(s) from your drawing. The item is not stored on the Clipboard and its action cannot be undone.

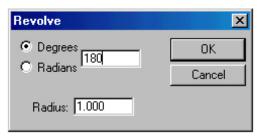
Select All (Ctrl+A) will select every item in the active window.

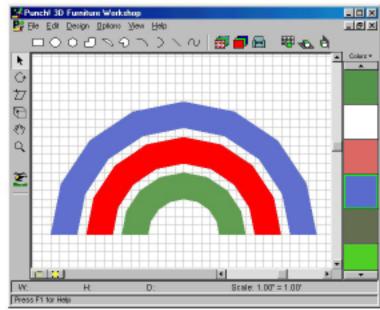
Group allows you to create a set of selected objects which can be treated as one item. Select which items you wish included in the group by holding down the **Shift** key and click on them, then select **Group. Ungroup** will cause the set to be treated as invidual items again. Most times you will need to **Ungroup** an **Object** that you wish to edit.

Revolve creates 3 Dimensional objects from a 2D item. Choose View>2D View>Front. Draw a rectangle then select Edit>Revolve, you will be presented with the Revolve dialogue box. The first input area is Degrees/Radians, in this box you will specify

how far around the center axis you wish to revolve the item you have drawn.

In the Example at right, each of the items (blue, red, green) began with the same size 2D object. Each specified 180 degrees, the difference is the green object specified One (1) Radius, the red object specified Two





(2) Radius and the blue object specified three (3) Radius.

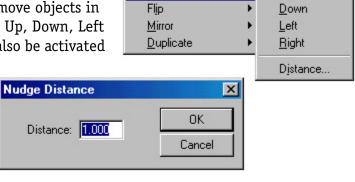
The usefulness of the **Rotate** command will depend on what you are drawing. If you are drawing a lamp, candlestick or other symetrical object, you will find it invaluable.

Uр

Nudge allows you to move objects in definable increments. The Up, Down, Left and Right selections can also be activated

by the arrow keys on your keyboard.

Through the **Distance** dialogue box, distances as small as 1 inch may be defined.



<u>N</u>udge

Flip

Mirror

Duplicate

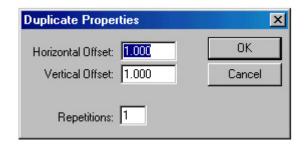
Nudge

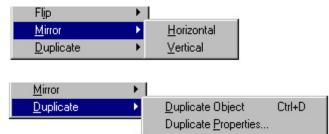
If you happen to draw an item, that appears to be "on the other side" of the grid, use the Nudge option to bring it back into the active work area.

Flip makes an exact duplicate flipped either Horizontally or Vertically. Mirror also makes an exact duplicate, but it will be a mirror image of the original.

Duplicate replicates the object exactly. You can specify the placement with the

Duplicate Properties dialoque box.





Horizontal

Vertical

THE DESIGN MENU

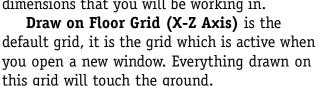
The commands available through the **Design Menu** give you control of your drawing
environment. From selecting the active grid, to
defining grid properties and controling layers.

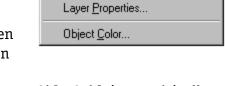
Draw on Grid options control which grid is active. The concept behind these three options are the most important to understand completely. Each grid represents two of the three dimensions that you will be working in.











Draw on Floor Grid (X-Z Axis)

Draw on Side Grid (Z-Y Axis)

Draw on Front Grid (X-Y Axis)

Grid Spacing...

Grid Visible

Snap to Grid

Grid Size...

Layers

Design

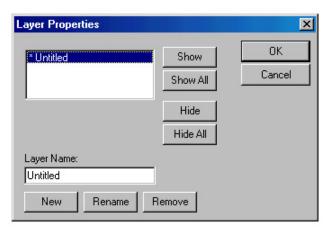
Draw on Front Grid (X-Y Axis) and **Draw on Side Grid (Z-Y Axis)** allow movements in the other pairs of directions.

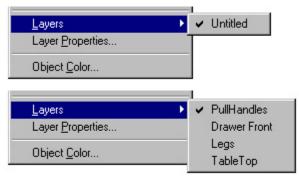
By default, the **Grid** is set at twelve inches; this way you can visualize that each square on the floorplan is 1 square foot. By defining a customized **Grid**, you can design to fit your specific needs.

You may choose to define a different **Grid Spacing** or a smaller **Snap Grid** for more precise drawing. **Grid Visible** toggles the grid on and off.

The **Snap to Grid** (Ctrl+R) option lets you quickly align items. When **Snap to Grid** is checked and you Drag & Drop an object, the object aligns automatically with the grid. By default, **Snap to Grid** is checked. The snap to distance is specified in the **Grid Spacing** field of the **Grid Properties** dialogue box.

The **Grid Size** option allows you to specify the size of your working area. It specifies the width and depth.





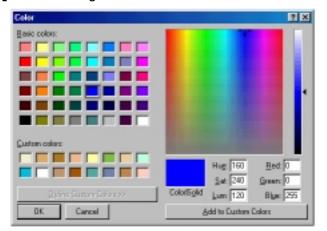
The **Layers** option allows you to store different information on different layers of your drawing. You can specify which layers are visible and which are hidden at anytime during the illustration process. Many of the functions are available through the **Layer Properties** dialogue box.

Plus, you're in no way limited to the **Colors** in the Preview Window. If you Double-click on any color you will be presented with the **Color Palatte**. With this palatte you are able to duplicate any color scheme you wish.

You can define a color several ways:

- 1. By clicking anywhere in the color matrix.
 - 2. By moving the slider along the right of the matrix.
- 3. By entering **Hue/Sat/Lum** values. The **Hue** is controlled by moving the pointer horizontally in the matrix, the **saturation** is controlled by moving the pointer vertically, and the **luminosity** is controlled by the slider at the right.
 - 4. By entering **Red/Green/Blue** values.

As you experiment with these values the color will be shown in the **Color|Solid** box. When you have defined the color you desire, click **Add to Custom Colors** to store it your document.



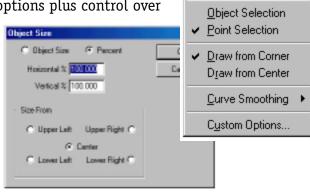
THE OPTIONS MENU

The commands available through the **Options Menu** give you a variety of selection options plus control over

the smoothness of curves.

The **Object Size** option allows you to specify exact measurements for each object.

The **Object Selection** and **Point Selection** options alter how your edits impact your object. If you are in **Object Editing mode**, changes will be effective on the object as a



Options

Object Size...

whole. If you are working in **Point Editing mode**, each point of the object is able to be treated separately. These menu items correspond to the icons at the bottom of your screen.

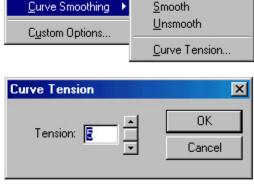
The **Draw From Center** and **Draw From Corner** options change the beginning points of objects drawn with the drawing tools. These menu items correspond to the icons at the bottom

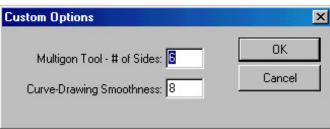
of your screen.

With **Curve Smoothing** you have the option to either smooth or leave unsmooth the edges of polygons, multigons, curved arcs, etc. The value used by these commands is entered in the **Curve Tension** dialogue box.

The **Custom Options** dialogue box is where you will enter the number of sides that will be drawn when you use the **Multigon Tool** and

the **Curve-Drawing Smoothness** setting.





Draw from Center





THE VIEW MENU

The commands available through the **View Menu** give you control over how your drawing is displayed in the drawing window.

The **Reset View** command returns the drawing to the default settings.

The **2D Design Tools** option (Ctrl+2) selects that listing of tools.



The **3D Design Tools** option (Ctrl+3) selects that listing of tools.

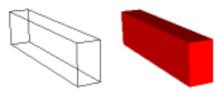




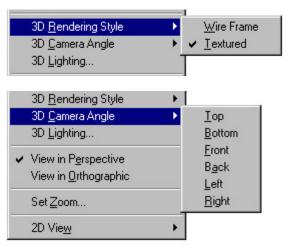
Position Readouts displays measurements across the bottom of the screen.

W: 0.750 H: 1.250 D: 5.250 Scale: 1.00" = 1.00'

3D Rendering Style toggles between **Wire Frame** and **Textured**.



3D Camera Angle allows you to view your drawing from a specific angle.



The **3D Lighting** option controls how bright the lighting appears.

View in Perspective displays objects which are further away as smaller than those nearby. View in Orthographic displays all objects at the same scale. Since some prefer one over



the other, both options are available. Perspective viewpoints give more information about depth and are often easier to view because you use perspective views in real life. Orthographic viewpoints make it much easier to

compare, for example, two parts of the object, as there is no question about how the viewpoint may affect the perception of distance.

Set Zoom allows you to specify the magnification of your drawing.

2D View will display your drawing from whatever angle you choose. You may find it easier to work in 2D view.



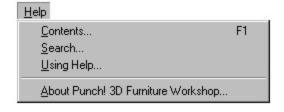


THE HELP MENU

Contents... [F1] displays the on-line Help File.

Search... allows you to search for a specific topic in the Help File.

Using Help... explains how to use Help.



About Punch! 3D Furniture Workshop... displays the program's splash screen.

CREATING CUSTOM 3D OBJECTS

With **Punch! 3D Furniture Workshop** you can create virtually anything. Custom furniture, decks, appliances, etc., can all be created, then you can import those creations into your design.

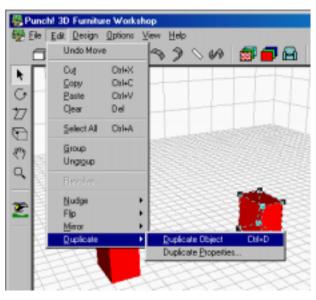
Launch **3D Furniture Workshop** by clicking on the icon in the lower right of your screen or by selecting **Launch 3D Furniture Workshop** from the **File** menu.

In this example we will draw a coffee table.

Select the 2D/3D Rectangle Tool and move the pointer to the Floor Grid.



To begin drawing the first leg Click & Drag from left to right and then front to back. (At this point, you will be drawing the width of the leg.) Then move the pointer up to draw the height. Click the left mouse button to finish the height.

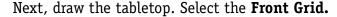




Duplicate this leg and drag it into position.

Repeat the duplication process for the two remaining legs.







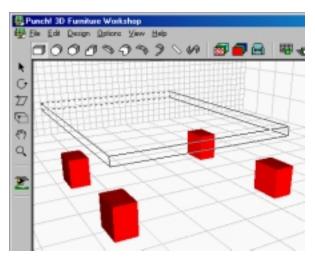
Select the **2D/3D Rectangle Tool** again. To draw the top, Click & Drag as you move left to right and back to front. At this point, you are drawing the height and width of the tabletop. Release the mouse button to complete

drawing the height and width of the top, then move the pointer back to draw the length.

With the **Pointer Tool**, lower the top onto the legs.

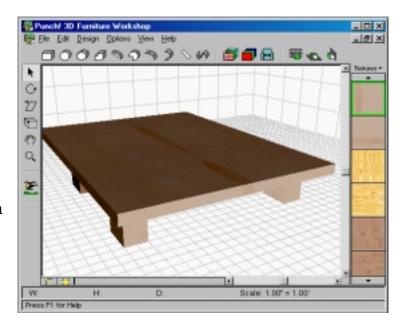


At this point, it is a good idea to group the individual components. Under the Edit Menu, Select All (Ctrl_A), then select Group. You will now be able to move the table as one piece.



If you wish, you can **Apply Textures** or **Apply Colors** to your table as you desire.

When you are finished, select Exit. You will be asked if you would like to place your drawing in Punch! Home Design. Select Yes.



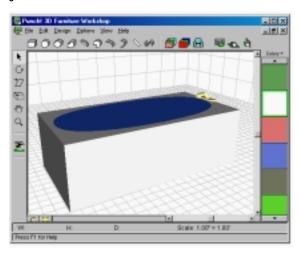
OPENING & EDITING OBJECTS

To open and edit an object using **3D Furniture Worksho**p:

1. Select the object in your project that you wish to edit.

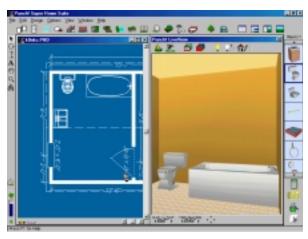
Double-click on the object. This will launch **3D Furniture Workshop** and load the image.

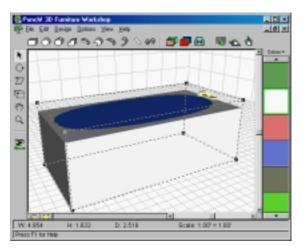
To change the size of an object, select it and Click & Drag along the axis you wish to alter.

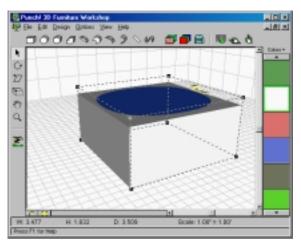


If you wish to place your newly-edited object into your design, select the **File** menu and then the **Exit and return to Punch! Home Design** option. You will be asked to confirm the placement of your edited object. If you choose No, the object in your design will not be changed.

If you choose yes, the object will be added to your design, replacing the original object. These modifications will not change the original in the Object Library.







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