Chief Architect® Viewer X5

Professional Design & Drafting Software

Contents

Chapter 1: Program Overview

Chapter 2: File Management

Chapter 3: Multiple Floors

Chapter 4: Layers

Chapter 5: Zoom & View Tools

Chapter 6: 3D Views

Chapter 7: Rendering

Chapter 8: Text

Chapter 9: Pictures, Metafiles, & Walkthroughs

Chapter 10: Layout

Chapter 11: Printing

Program Overview

The Chief Architect Viewer is a powerful tool that facilitates the communication process between design professionals and their clients. The Chief Architect Viewer offers many useful features:

- Open plan and layout files created by Chief Architect Full.

- Explore the plan in as much detail as desired.

- Modify the display of the plan to see more or less detail.

- Create 3D views of the full 3D model.

- Add notes anywhere in the drawing for review by your design professional.

- Print from any view.

- Export views as either picture files or Windows metafiles for use in other programs.

- Search for plans in a plan database.

If you would like to learn more about Chief Architect, select **Help> Visit Chief Architect Web Site** from the program menu.

Chapter Contents

Startup Options

When the Chief Architect Viewer opens, the **Startup Options** dialog displays, allowing you to choose how you want to begin working in the program or access useful resources.

The **Startup Options** dialog can be opened at any time by selecting **File> Startup Options** .

1 **Getting Started**- Click to launch your default internet browser to the Getting Started page on our web site, www.chie-farchitect.com. There, you will find links to a variety of online resources to help you begin using the program.

2 Choose **Open Plan/Layout** to work on an existing plan or layout file. See "Opening a Plan or Layout File" on page 18.

3 **Recent Files** lists the names of the most recently opened files. Click on a name to open the file.

4 The **Build** number of the program version you are using displays here.

The Chief Architect Viewer Environment

- The program's tools are accessed using the menus and toolbar buttons.

- Keyboard shortcuts are available for most tools.

- Contextual menus display with a right-click of the mouse.

- The Status Bar at the bottom of the screen provides tool descriptions and other information about the current task.

Title Bar → Chief Architect Viewer X5 - [Kitchen: Floor Plan]

Menus → File Edit 3D Tools Window Help

Toolbar Buttons

Selected Object

Edit Toolbar

Select Objects [Space]   Floor: 1   Object layer: Text   X: 361 9/16", Y:

Pointer   *Crosshair Lines*   *Status Bar*
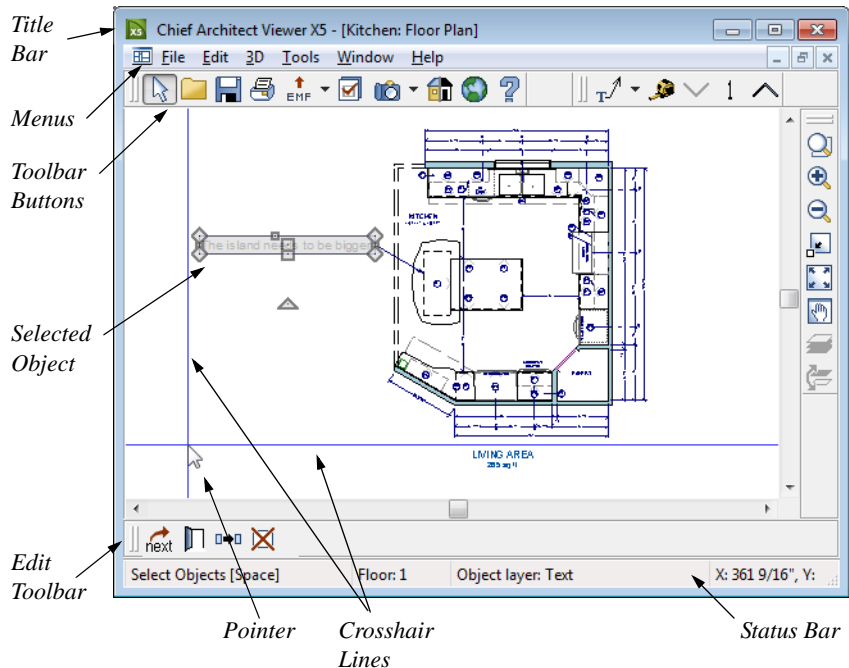
Using the Mouse

Most of the program is controlled using the mouse. Objects and most views are created by either clicking the left mouse button or by dragging the cursor in the direction of a desired view. The **Status Bar** at the bottom of the Chief Architect Viewer's main window indicates which tool is active.

The **left button** is the primary button used in the Chief Architect Viewer. Unless specified otherwise, Chief Architect Viewer documentation refers to the left mouse button.

Note: If you are left-handed and have re-programmed your mouse, reverse the instructions for left and right buttons in this manual.

9

The **Right button** has several uses. Right-click to select any object.

If, for example, the **Full Camera** tool is active, the left mouse button only allows you to click and drag to create camera views. You can select other object types such as text with the right mouse button.

You can also use the right mouse button to open a context sensitive menu with additional editing commands.

The **Middle button** can be used to pan in floor plan view

You can also program it to work as a double-click.

The **Mouse Wheel** can be used to zoom in and out in most views.

Using the Edit Handles

When you select an object, its edit handles display.

When you pass the mouse over the edit handles, the pointer changes to show how you can use that handle.

- A two-headed arrow indicates that the object, corner or edge can be moved in the direction of the arrows.

- A four-headed arrow indicates that the selected object or edge may be moved in multiple directions.

- A circular arrow indicates that the selected object can be rotated.

Resize handles display along the edges of the object are used to change the size.
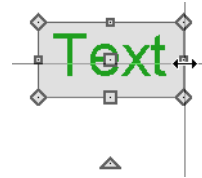
The Move handle at the object's center lets you move the object.
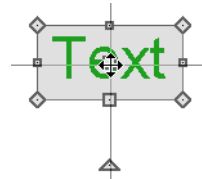
The triangular Rotate handle lets you rotate the object.
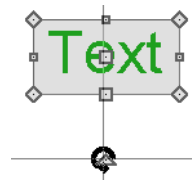
You can cancel any edit handle operation before it is completed by pressing the Esc key on your keyboard or by pressing any two mouse buttons at the same time.

The edit handles that display depend on the type of object selected, the current view, and how far you are zoomed out.

Edit handles do not resize as you zoom in or out. If you are zoomed out far enough, some edit handles may be hidden so that they do not stack over one another. As you zoom in, these handles become visible again.

Toolbars

The Chief Architect Viewer installs with a set of toolbars docked to the top, right side and bottom of the program window.

Using the toolbar buttons is the fastest, easiest way to access many program features.

The toolbars that display in a given view depend on the view type. For example, toolbars that control camera position display in 3D views but not in floor plan view.

When you pass the pointer over a toolbar button, a "tool tip" displays the name of the tool. When you see one of these tool tips, press F1 to get more information about that item. A more detailed description displays in the Status Bar at the bottom of the window.

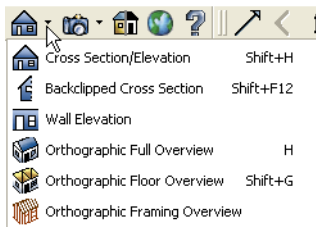Click on the arrow to the right of a button to display a drop-down list of related tools. For example, click the arrow to the right of the **Window** button to display a drop-down list of the other Window Tools.

The most recently selected tool displays in the toolbar.

You can, if you wish, move any toolbar to a different location. Toolbars can be docked to any side of the program window, or they can be undocked and left floating. Undocked toolbars can also be moved outside of the program window.

Toolbar locations are saved between program sessions.

The Edit Toolbar

When you select an object, the edit toolbar appears. By default, it is located at the bottom of the program window. The toolbar buttons that display can be used to edit the selected object(s). Which buttons display depends on the type of object selected, the current view, and how you selected the object.

The edit toolbar buttons are the same as the options in the contextual menu when you right-click on an object.

Hotkeys

Many commands can be invoked from the keyboard. Press Alt on your keyboard and press the underlined letter in a menu name to access that menu, as well as items in the menus and submenus.

Other keys or key combinations will invoke a variety of program commands. If a Chief Architect Viewer menu item has a keyboard shortcut, or hotkey, associated with it, that hotkey will display to the right of its name in the menu.

Menus

The Chief Architect Viewer uses a standard Windows menu format. The menus are located below the title bar in the program window and can be used to access nearly all tools in the program. Click on a menu name to expand it, then click on a menu item to either activate that tool or access the item's submenu. Items with a submenu have an arrow to the right of the name.

Menu items with an icon to their left have a toolbar button associated with them.

The menus can be accessed using the keyboard. Press the Alt key once to enable this functionality - one letter in each menu will become underlined. Press the key associated with one of these underlined letters to expand its menu - one letter in each menu item's name will be underlined. Press the key associated with one of these letters to activate that tool or access the item's submenu. Press the Esc key to undo your last selection, or click with the mouse to exit out of this functionality.

Many tools in the Chief Architect Viewer also have hotkeys associated with them. If a menu item has a hotkey, it will display to the right of the item's name.
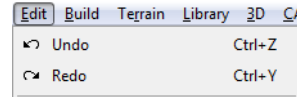
Edit menu items with button icons to the left and hotkeys to the right

In the Chief Architect Viewer documentation, menu paths are written in this format: **Tools> Layout Page> Up Page**

. An icon image after the menu path indicates that a toolbar button is also available.

Contextual Menus

Contextual menus are context sensitive menus that display tools relevant to a selected object or view.

To access contextual menus, right-click on an object, in an empty space in a view window or in a text field in any dialog box.

Dialogs

Many functions in the Chief Architect Viewer are accessed through dialog boxes.

Dialog tabs and settings can be accessed using the mouse. You can also navigate the settings on a given dialog tab using the keyboard:

- Press the Tab key proceed from one setting to the next, or Shift + Tab to go in the reverse direction.
- Line items in tree lists can be browsed using the arrow keys. Up and Down navigate the list, while Left and Right expand and contract categories.

- Settings with spin control arrows ⬍ can be adjusted by typing in the text field, using the up and down arrow keys, or the mouse scroll wheel.

- Settings with slider bars ⎯⬇⎯ can be adjusted by typing in the text field, using the left and right arrow keys, or the mouse scroll wheel.

- Press Enter on your keyboard to close any dialog and apply your changes.

Specification Dialogs

Each object that you can draw in the Chief Architect Viewer has a unique specification dialog where you can enter size, style and other information specific to the selected object. To access it, select the object and click the **Open Object** edit button.

You can also double-click on an object with the **Select Objects** ⬚ tool active to open its specification dialog.

The Status Bar

The Status Bar at the bottom of the main program window displays information about the current state of the program.

This information depends on a variety of conditions such as the type of object selected, and the current position of the pointer. The information may include the following:

- A brief description of the toolbar button or menu item highlighted by the mouse.

- A description of the selected object.

- The total number of objects currently group-selected.

- Basic information about a selected library object, folder, or catalog.

- The current floor.

- The screen redraw time.

- The length and/or angle of an object as it is being drawn.

Message Boxes

As you work in the Chief Architect Viewer, the program will alert you if you command it to do something that could potentially cause a problem, or if the program encounters a problem that needs your attention.
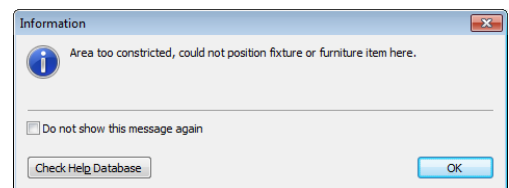
Situations where such message boxes may display include:

- Closing a file or view without saving;

- A file referenced outside the program, such as an image or texture, is missing.

You can access the settings in a message box using the mouse, or navigate them using the keyboard:

- Press the Tab key proceed from one setting to the next, or Shift + Tab to go in the reverse direction.

- When a checkbox is the active setting, press the Spacebar to check or to clear it.

- Buttons have hotkeys associated with them. Press the Alt key on the keyboard to underline the hotkeys in the current message box.

- Press Enter on your keyboard to close the message box and perform the action associated with the highlighted button.

Some message boxes include a "Remember my choice" or a "Do not show this again" checkbox. Check this box to prevent messages of this specific type from displaying in the future.

Viewing a Plan

You can see a model in a variety of different 2D and 3D views. You can display more than one view at a time and in any view, you can pan or zoom in or out. See "Zoom & View Tools" on page 35.

Floor plan view is a 2D view of the model and is most commonly used for drawing and editing. In floor plan view, each floor displays separately and you can only edit one floor at a time; however, you have extensive control over which objects display at any given time, can easily switch between floors, and can also display items on a second floor for reference.

You can create interior and exterior 3D views of your model from any perspective. As in

floor plan view, you can control which objects are visible. See "3D Views" on page 43.

All views can be exported as a graphic image. See "To export a picture" on page 75.

Tape Measure

Use the **Tape Measure** tool to draw a temporary dimension line between any two points in the drawing area. The tool will place temporary markers at the start and end points of the dimension line. These points and the line both disappear when you release the mouse button. If an object is located by the temporary line, you can snap to it.

Color Chooser Dialog

The **Color Chooser** dialog is opened by selecting **Tools> Color Chooser** or by clicking on the color button found in the

Text Specification dialog or on the color bar on the Line Style and Arrow tabs of the **Line Specification** dialog.
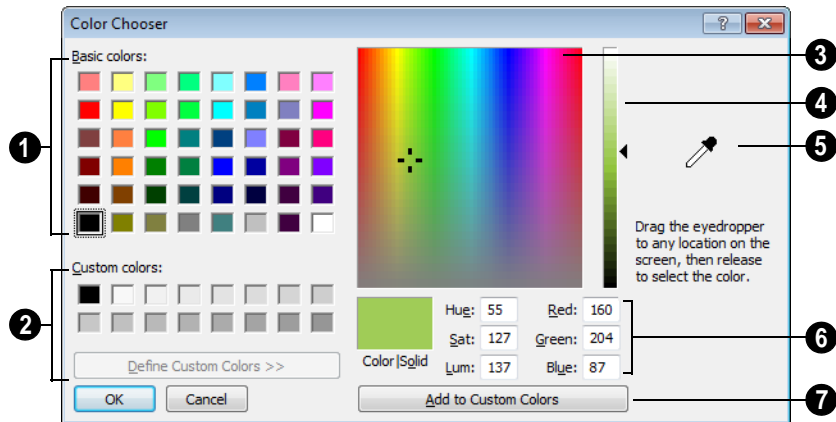
1 Click in any one of the **Base colors** boxes to select it as the new color.

2 Click in one of the **Custom colors** boxes to either select it as the new color or to specify it as the box for a new custom color to be defined.

3 Click anywhere in the color palette area to dynamically choose a color. The location of a selected color is identified by a black crosshairs.

4 Click anywhere in the vertical bar to adjust the selected color's darkness.

5 Drag the **Color Chooser Eyedropper** anywhere on your monitor and release

the mouse button to select the color displaying at that location.

> You can select a color from any program window. Before opening the Color Chooser dialog, make sure the desired color can be seen onscreen by tiling Chief Architect Viewer and the other program window.

6 Information about the selected color displays and can be edited here.

7 Click **Add to Custom Colors** to add the color to selected Custom Colors box.

Getting Help

There are many forms of help available in the Chief Architect Viewer including: Tool Tips, the Status Bar, and the online Help menu.

All these forms of help assume you have a basic working knowledge of the Windows operating system, including how to use a

mouse, open, close and save files, copy, paste, and right-click to access contextual menus. Help also assumes you are familiar with Windows terms.

More information is available in the product documentation in electronic format and on

Chief Architect's official web site, www.chiefarchitect.com.

Tool Tips

When you move the pointer over a toolbar button or menu item, a **Tool Tip**displays, offering a brief description of the tool. More information displays in the Status Bar at the bottom of the window.

Online Help Menu

Online **Help** is a searchable menu that provides information about all of the tools in the Chief Architect Viewer. Select **Help>**

Contents & Index [?] to open the online Help and explore the table of contents, browse the Index, or search for keywords.

Current Mode Help

Online Help can also be used to provide instant information about toolbar buttons, menu items, and objects in your plan.

• When you move the cursor over a toolbar button or menu item, a brief summary of that tool displays in the Status Bar. Press the F1 key to open online Help to a page with more information about the tool.

• When an object is selected, edit handles display. Place the cursor over an edit handle and press **F1** to open online Help to a page with information about that handle.

• Press the **Help** button in any dialog box to open online Help to a page describing the options in that dialog.

Warning & Information Messages

As you work, the program may occasionally present Warning or Information messages regarding the operations you are performing. These messages are intended to help you use the program as designed and avoid potential problems. See "Message Boxes" on page 13.

View Reference Manual

Select **Help> View Reference Manual** [?] to view the contents of the Help Contents & Index in on online **.pdf** file.

Chief Architect strives to make our documentation as helpful as possible for all of our customers. Please send any questions, comments, or feedback to documentation@chiefarchitect.com.

About Chief Architect Viewer

Select **Help> About Chief Architect Viewer** to view the program's version number and its release date.

Contact information for Chief Architect, Inc. is available on the **More Information** tab.

File Management

The Chief Architect Viewer reads and edits two main document types: **.plan** files and **.layout** files. The complete 3D model of a structure, surrounding terrain and any CAD data associated with it are stored in the plan file. Data used to create working drawings and the links to various views or details are stored in the layout file.

All commands related to opening, saving and closing plans are located in the File menu. You can also open plans from the **Startup Options** dialog. See "Startup Options" on page 8.

Chapter Contents

- Compatibility with Other Programs
- Chief Architect Viewer Data
- Opening a Plan or Layout File
- Saving a Plan or Layout File
- Auto Archive
- Undo Files
- Searching for Plans
- Closing Views and Files
- Exiting The Chief Architect Viewer

Compatibility with Other Programs

Plans produced in the Premier Version of Chief Architect X5 can be read by the Chief Architect Viewer X5.

Files that have been opened and saved in the Chief Architect Viewer X5 can then be read again in Chief Architect Premier X5, allowing users to share their thoughts and ideas with their design professional.

Chief Architect Viewer Data

When the Chief Architect Viewer X5 is installed, the program automatically creates a folder in the user Documents directory called **Chief Architect Viewer X5 Data**. This folder contains important information and should not be moved, renamed or deleted.

> ⚠ If the Chief Architect Viewer X5 Data folder is renamed, moved or deleted, the program will automatically replace it using default information from the Chief Architect Viewer installation folder. When this occurs, customized user settings and custom user library content will not be available.

Because the Chief Architect Viewer X5 Data contains custom user data, it is not deleted when the program is uninstalled.

Template

Opening a Plan or Layout File

The Chief Architect Viewer allows you to open, view and add comments to plan and layout files created for you by your design professional. Before opening one of these files, you must copy it onto your computer's hard drive in Windows Explorer.

It is recommended that you not save these files in the program's installation folder. A good location for these files is "Documents"

("My Documents" in Windows XP), which is specifically intended for your own files.

Plan and layout files often refer to external support files such as images that your design professional may have also given to you. It is best to keep all files associated with your drawings in the same folder.

For example, you can create a folder called "Chief Architect Viewer Plans" or another name you prefer and then copy all the files

given to you there. See Microsoft Windows Help to learn how to create folders.

⚠ Never open a file located on a server or other computer on a network, or on a removeable storage device. Copy such files to your local machine's hard drive first, and then open the copy.

When the file you wish to open and any support files are saved on your computer,

select **File> Open Plan** 📁 to open a **.plan**

file or **File> Open Layout** 🇱 to open a **.layout** file located on your computer. The Chief Architect Viewer automatically browses to the directory you last used to open a file.
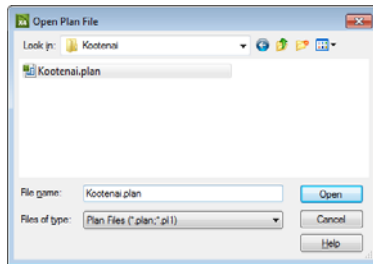
In the **Look in** drop-down, browse to the location on your computer where the file you wish to open is saved.

Any folders and either **.plan** or **.layout** files in the current location display in the field below.

Click on the file you wish to open. Its name will display in the **File name** text field.

To open files of a different type, select one from the **Files of type** list. The only file types available are **.plan** and **.layout**.

When the desired file is selected, click **Open**.

The **Open Plan File** and **Open Layout File** dialogs can be resized by clicking and dragging the lower right corner.

Recently Opened Files

The names of the plan and layout files you most recently opened or saved display at the bottom of the **File** menu. You can click on a recent file to open that file without using the **Open Plan File** dialog.

The names of recently open files also display in the **Startup Options** dialog. Click on the name of a file to open it. See "Startup Options" on page 8.

Saving a Plan or Layout File

💾💾 There are two options for saving plan and layout files: **File> Save** and **File> Save As**.

💡 Although the program warns you if you try to exit without saving, you should get in the habit of saving plan files before exiting the program.

Both **Save** 💾 and **Save As** 💾 can be used to save your plan and layout files; however, they accomplish this in two different ways.

- **File> Save** 💾 saves the current state of your plan or layout file without changing its name and should normally be used for saving your work.

19

- **File> Save As** ■ opens the **Save Plan File** dialog, allowing you to save the plan file using a different name or location on your computer.

When you first open a file in the Chief Architect Viewer, it is recommended that

you use **Save As** ■ to modify the name of the file so that it can be distinguished from the original file that you received from your design professional.

To save a plan or layout file

1. Select **File> Save As** ■ to open the **Save Plan File** dialog.
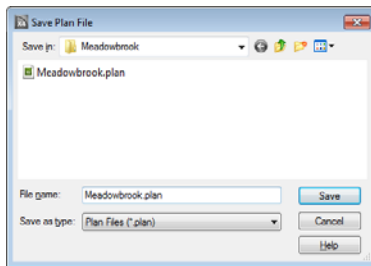
2. Particularly if you were sent both plan and layout files, it is best to use the same **Save in** location as the original files. See "Opening a Plan or Layout File" on page 18.

3. In the **File name** text field, type a name for the file.

> Rather than type a new name, you can click before the file name to place your cursor at that location, then type "Edited_" to distinguish this file from the original.

4. Chief Architect Viewer automatically assigns the **File of type** and file exten-

sion **.plan** to plan files and **.layout** to layout files.

5. When both the Save in location and File name are correct, click **Save**.

Initially, all **Open** ▢ and **Save As** ■ operations go to the "My Documents" folder of your computer. After that, the location last visited is remembered and subsequent

Open ▢ or **Save As** ■ commands default to the directory last used for that operation. This path is saved when the program exits. The next time Chief Architect Viewer is launched, these defaults are used.

Exporting Files

Chief Architect Viewer has a number of options for exporting and importing information out of and your drawings. Often, file export dialogs are nearly identical to the **Save Plan File** dialog. See "Pictures, Metafiles, & Walkthroughs" on page 75.

Similarly, file import dialogs are often similar to the **Open Plan File** dialog. See "Importing Files" on page 22.

Backing Up Your Files

It is always a good idea to create backup copies of all your important files on your computer.

It is strongly recommended, however, that you never save directly:

- Across a network, such as onto a server;
- Onto removable media such as a USB thumb drive, CD, or DVD;
- Across the Internet.

Instead, copy your files to such locations in Windows Explorer only after you have saved them on your computer's hard drive and exited the program.

Archive folders are used by Chief Architect Viewer to manage prior versions of your files. You should not view these files as a substitute for your own backup routine, and should never save a file in an archive folder.

When backing up your Chief Architect Viewer files, consider backing up not only your **.plan** files, but your custom user data, as well - including library content, toolbar configurations, and textures. This custom data is all located in the Chief Architect Viewer Data folder, so it can be easily backed up. See "Chief Architect Viewer Data" on page 18.

Auto Archive

The first time a plan or layout is saved, the Chief Architect Viewer creates an Archive folder in the Chief Architect Viewer Data folder. The Archive folder contains Auto Save and Archive files.

The program does not create Auto Save and Archive files for untitled plans and layouts. In order for these to be created, a file must have been previously saved and given a name and save location on your computer. Further, Archive files are only updated when you save your work.

Auto Save and Archive files should not be viewed as a substitute for regularly saving your work by selecting **File> Save** 💾 or pressing Ctrl + S on the keyboard, nor should they be considered an alternative to your own file backup routine.

Archive Files

Every time a drawing is saved, Archive files that keep a historical archive of your plan are automatically created or updated.

⚠ f you do not save your work regularly, your archive files will not be updated.

Archive files are meant to be for emergency use only. If you must access an archive file, open it as you would any other file. See "Opening a Plan or Layout File" on page 18.

As soon as the file is open, use **Save As** 💾 to save this file to another location.

Auto Save Files

As you work, the Chief Architect Viewer automatically creates Auto Save files at regular intervals when changes are made to a file but not saved by selecting **File>**

Save 💾.

These Auto Save files are appended **_auto_save.plan** or **_auto_save.layout** and are saved in the Archive folder.

When you close a file normally, its Auto Save file is retained until the next time the file is opened - at which time the Auto Save file is overwritten.

 JonesResidence_auto_save.plan

Auto Save file after normal shut-down

Auto save files created as a result of an improper program shutdown are appended

_auto_save_bak.plan or
**_auto_save_bak.layout**.

Auto Save file after abnormal shut-down

If your computer shuts down accidentally, you can recover some of your work by opening the **_auto_save_bak** file.

⚠️ A file is auto saved only if you have saved it previously. Auto Save does not work for unnamed files.

When you reopen a file after a computer shut down or system crash, the following dialog displays if an Auto Save file newer than the original file is found.
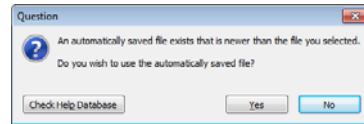
Even with Auto Save, you should save your work manually on a regular basis using any of the following methods:

• Click the **Save** 🖫 button.

• Select **File> Save** 🖫.

• Press Ctrl + S on the keyboard.

Undo Files

The Chief Architect Viewer stores a set number of copies of all open plan file changes, known as undo files. Undo files are referenced whenever you select **Edit>**

Undo ↺ or **Edit> Redo** ↻.

Undo files are stored in the Windows Temporary Directory. When you use Windows system cleanup features, these files can be deleted. Because of this, you should only use these type of utilities when the Chief Architect Viewer is not running.

When the Chief Architect Viewer is closed normally, any current Undo files are deleted.

Importing Files

Chief Architect Viewer has a number of options for exporting and importing information out of and into your drawings. Often, file import dialogs are nearly identical to the **Open Plan File** dialog. See "Pictures, Metafiles, & Walkthroughs" on page 75.

Similarly, file export dialogs are often similar to the **Save Plan File** dialog. See "Exporting Files" on page 20.

Searching for Plans

 If your design professional has given you multiple plans to consider, he or she may also have given you a searchable plan database to help you locate plans that meet your needs. Select **File> Search for**

Plans to launch the **Find Plan Wizard** which allows you to search such a database.

Find Plan Wizard

The **Find Plan Wizard** can be used to search for plans using stored information about each plan, such as the square footage and the number of bedrooms and other room types.
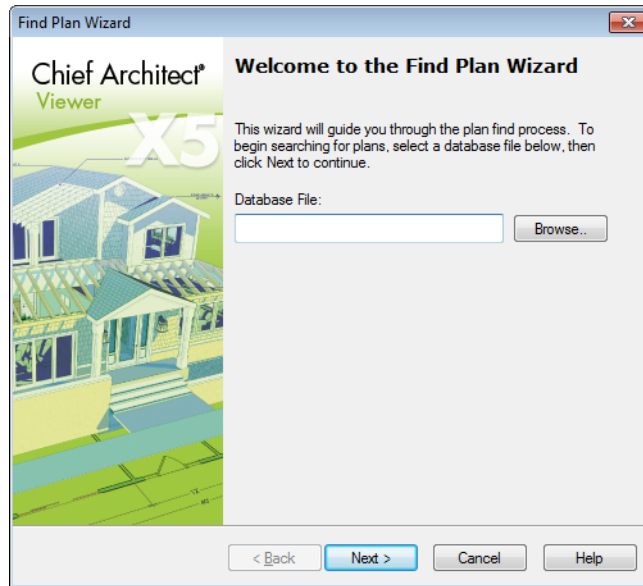
Click the **Browse** button, then browse to the location of the plan database given to you by your design professional. It will have the file extension **.DB** and should be located in the same folder as the plans that were provided to you, which should be saved on your local hard drive.

If you wish, you can instead type the full pathname of the plan database file.

Click **Next** to continue.

House Style

At the bottom of each page, the number of plans that match your current search parameters displays. As you modify the parameters, this number increases or decreases as matching plans are found.

On any page, click the **Back** button to modify any previously selected parameters.

Select the style of house desired, the number of floors in the house, and the number of bedrooms, then click **Next** to continue.

House Size

Select the number of bathrooms, size, and desired price range and square footage of the house, then click **Next** to continue.

Plan Details
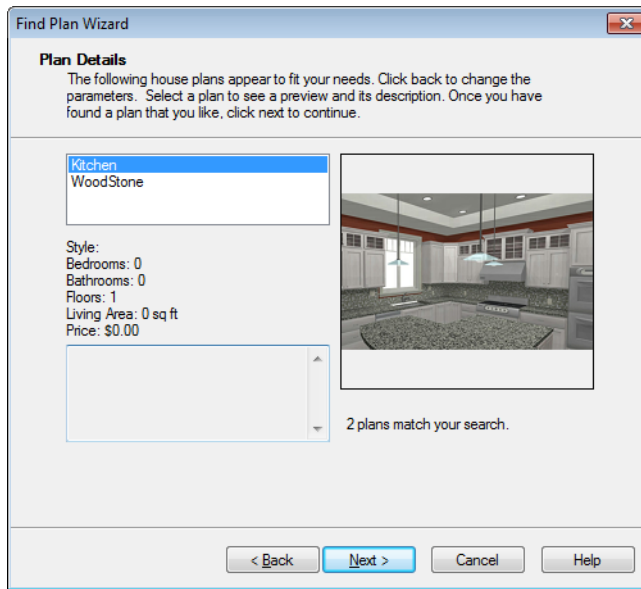
Click on the name of a plan in the list to see a preview of the plan, if one exists.

Click **Next**, then click the **Finish** button to open the selected plan.

Closing Views and Files

Choose **File> Close** to close the active window. If it is the last open view for a plan and you have not saved it, the program prompts you to save before closing.

Select **File> Close All** to close all currently open windows.

> Although the program warns you if you try to exit without saving, you should get in the habit of saving plan files before exiting.

Exiting The Chief Architect Viewer

Select **File> Exit** to exit the program. If you have not saved any open plans, you are reminded to do so. It is better to save your work before exiting than to save on exit.

When you exit from the program using **File> Exit**, all Autosave files and Undo files are automatically deleted.

Multiple Floors

Chief Architect plan files can have up to 30 floors, plus a foundation and attic. The Chief Architect Viewer allows you to view all of them in a variety of ways.

Chapter Contents
- Displaying Floors
- The Current Floor
- The Reference Floor

Displaying Floors

The Chief Architect Viewer allows you to view the floors in your plan in a variety of ways.

In Floor Plan View

In floor plan view, only one floor can be active for editing at a time. This is referred to as the Current Floor. See "The Current Floor" on page 28.

In addition to the Current Floor, one other floor can be displayed for reference purposes: the Reference Floor. Objects on the Current Floor can snap to those on the Reference Floor, helping you align objects. See "The Reference Floor" on page 28.

In 3D Views

In most 3D views, all floors in a plan are visible, from the foundation up to the attic. There are two exceptions:

- **Floor Camera** views.

- **Floor Overviews** .

Floor Cameras and **Overviews** show the Current Floor only, not including its ceiling, while. See "3D View Tools" on page 44.

The Current Floor

Only one floor can be active at any given time. The active floor is referred to as the **Current Floor**.

Floor Up / Floor Down

If you are working with more than one floor, you can select **Tools> Reference Floors> Up One Floor** or **Down One Floor** to switch from one floor to another.

You can change the current floor in floor plan and 3D views. The current floor displays on

the **Change Floor/Reference** button,

which can be found between the **Down One Floor** and the **Up One Floor** buttons.

Floors become available once they have been built. The Attic and foundation levels are also accessible using these tools.

Change Floor / Reference

If there are multiple floors, select **Tools> Reference Floors> Change Floor/Reference** to open the **Change Floor/Reference** dialog, where you can select both the current floor and which floor is used in the Reference Display, as well as control the appearance of the Reference Display.

The Reference Floor

When there is more than one floor in a model, it is often helpful to see how different floors relate to each other. Any floor can be shown as the **Reference Floor** along with the current floor.

Reference Display

To display the Reference Floor, select **Tools> Reference Floors> Reference Display** or press F9 on your keyboard.

Note: If objects on the current floor and the Reference Floor have edges that line up, the Reference Floor may be difficult to see on screen. When lines of two different colors are superimposed upon each other, discoloration may result.

Reference Display Options

The display of objects in the Reference Display is controlled by selecting **Tools> Reference Floors> Reference Display Options**. See "Layer Display Options Dialog" on page 32.

Change Floor / Reference

By default, the floor below the current floor is the Reference Floor, but any floor can be referenced using the **Change Floor/Reference** dialog. To open the dialog, select **Tools> Reference Floors> Change Floor/Reference** button.
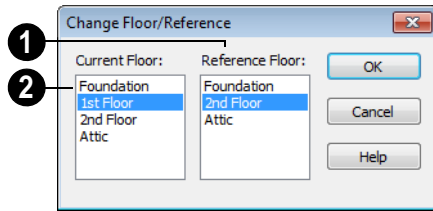
1 The **Reference Floor** currently used for reference is highlighted here. You can select another floor.

2 The **Current Floor** is highlighted here. You can select another floor to make it the current floor.

Swap Floor/Reference

If one floor is defined as the current floor and another floor is defined as the reference floor, select **Tools> Reference Floors> Swap Floor/Reference** to switch the status of the two floors.

Layers

Layers are used to organize and manage the display of all objects in all views. A layer can be thought of as a transparency sheet with objects placed on it for viewing. Nearly all views use multiple layers, like a stack of transparencies put together to show different types of objects.

You can specify whether each layer displays in a particular view in the **Layer Display Options** dialog.

Multiple layers are organized into Layer Sets, which allow you to control which objects display in different views.

Chapter Contents

Layer Sets

Layer Sets are used to control the layer settings for different views in a plan or layout file.

A layer set consists of a complete list of the layers in the current plan or layout along with the display settings for each layer as set for a particular type of view. These display settings can be modified, and can be different for each type of view. See "Layer Display Options Dialog" on page 32.

Layer sets are file specific, which means that changes made in one plan or layout file have no effect on the settings in other files.

The Chief Architect Viewer uses a different layer set for the each type of view of your plan:

• Floor plan view.

• Camera views and Overviews. See "3D View Tools" on page 44.

• Cross Section/Elevations. See "3D View Tools" on page 44.

• Framing Overviews. See "Framing Overview" on page 46.

• Reference Display. See "The Reference Floor" on page 28.

While any view is active, select **Tools> Display Options** to make changes to the layer set used for that view type.

Any changes made to settings in the **Layer Display Options** dialog for one particular view will affect all views using that same layer set. For example, if you make changes for a camera view, all camera views and overviews in the current plan will be affected.
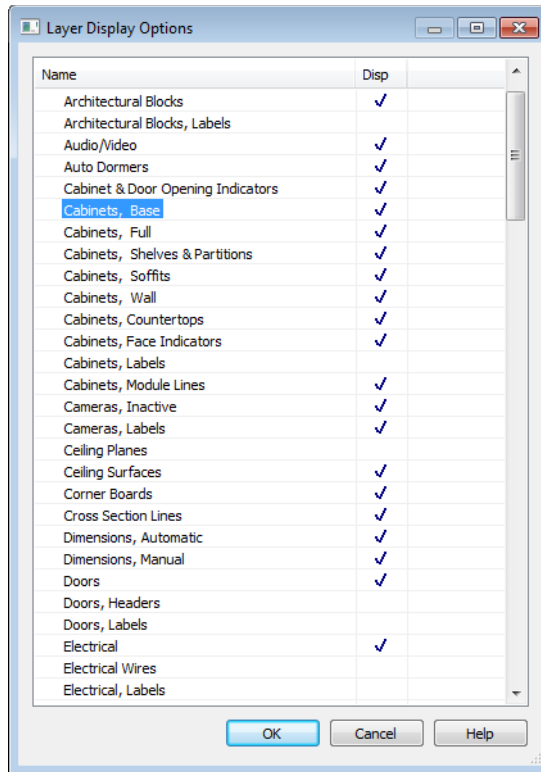
Layer Display Options Dialog

The **Layer Display Options** dialog controls the display of layers in the active layer set. It consists of a table that lists all available layers and the attributes for each.

From any view, select **Tools> Display Options** to open the **Layer Display**

Options dialog. This dialog is resizeable and maintains its size between program sessions.

Selecting **Tools> Reference Floors> Reference Display Options** opens the **Layer Display Options** dialog with the Reference Display Set active. See "The Reference Floor" on page 28.

Layer Display Options

Name	Disp
Architectural Blocks	✓
Architectural Blocks, Labels	
Audio/Video	✓
Auto Dormers	✓
Cabinet & Door Opening Indicators	✓
Cabinets, Base	✓
Cabinets, Full	✓
Cabinets, Shelves & Partitions	✓
Cabinets, Soffits	✓
Cabinets, Wall	✓
Cabinets, Countertops	✓
Cabinets, Face Indicators	✓
Cabinets, Labels	
Cabinets, Module Lines	✓
Cameras, Inactive	✓
Cameras, Labels	✓
Ceiling Planes	
Ceiling Surfaces	✓
Corner Boards	✓
Cross Section Lines	✓
Dimensions, Automatic	✓
Dimensions, Manual	✓
Doors	✓
Doors, Headers	
Doors, Labels	
Electrical	✓
Electrical Wires	
Electrical, Labels	

The layers in the **Layer Display Options** dialog can be sorted by any of the columns.

- Click in the **Disp** column to remove or add a checkmark. A checkmark indicates that the layer is set to display in the current view.

- Click **OK** to close the dialog and apply your changes.

- Click **Cancel** to close the dialog, ignoring any edits.

- Click and drag the size grip at the lower right corner of the dialog to resize the **Layer Display Options** dialog box.

Note: Not all objects display in all views. For instance, door labels do not appear in 3D views.

33

Zoom & View Tools

Use the Zoom tools to position the current view. To view a specific area, you may need to zoom in so that the entire screen is filled by only a single room. At other times you may need to view the entire plan.

One layout file can be open at a time, but there is no limit to the number of plan files that can be open. The name of the file and the type of view displays at the top of each view window in its title bar. If the view is saved, its name also displays.

There are a number of ways to pan across the screen, shifting the visible part of the plan slightly while still maintaining the same zoom factor.

Multiple views of one or more open files also can be arranged and managed using the View tools.

Chapter Contents

- Zoom Tools
- Undo Zoom
- Fill Window
- Panning the Display
- Swapping Views
- Window Menu Tools
- Cascade
- Tiling Views
- Arrange Icons
- Closing Views

Zoom Tools

Zoom is used to magnify any given area on the plan or 3D view. Select **Window> Zoom**, then click and drag a marquee around an area on screen. When you release the mouse, the selected area expands to fill the screen.

When the zoom is complete, whatever tool was active prior to selecting the **Zoom** tool automatically becomes active again. If another zoom is needed, click the **Zoom** tool again.

Zoom In - Click to zoom in towards the screen center by a factor of two.

Zoom Out - Click to zoom out from the screen center by a factor of two.

Undo Zoom - Reverse the last zoom operation. See .

Fill Window - Fits all visible items on screen. See .

Fill Window Building Only - Fits all walls and railings on the current floor on screen.

Pan Window - Move the display without changing the zoom factor. See .

Zooming With the Mouse Wheel

Use the mouse wheel to zoom in and out in plan and 3D views. Scrolling the mouse wheel one click up or down zooms in or out, centering on the location of your pointer and changing the zoom by about 10%.

Note: Depending on the configuration of your mouse, it may be necessary to hold down the Ctrl key while turning the mouse wheel. If zooming in and out are not working correctly, contact the manufacturer of your mouse and mouse driver for their assistance.

Zooming in 3D Views

Zooming in 3D views does not change the camera's location or field of view. Instead, the extents of the view are expanded or cropped.

Undo Zoom

Select **Window> Undo Zoom** to reverse the last zoom operation.

Note: Undo and Redo do not affect zoom.

Zoom and **Undo Zoom** are also available through the contextual menu. See

Fill Window

In floor plan view or a cross section/ elevation view, select **Window> Fill Window** or press the **F6** key to view nearly everything on screen that is visible, including the Reference Display. CAD Points are the only objects that are not included when Fill Window is used.

If you are zoomed in so that only a portion of the drawing displays on screen, selecting **Fill Window** zooms out so that the entire view fits on the screen. If you are zoomed out so that the entire drawing is smaller than the screen, selecting **Fill Window** zooms in until the drawing fills the screen.

When the drawing sheet is shown, **Fill Window** zooms to the sheet borders.

Fill Window Building Only

Window> Fill Window Building Only is similar to **Fill Window**, but zooms in or out to so that all walls and railings in the view fill the current window. Other objects are ignored.

In 3D Views

In 3D views, **Fill Window** and **Fill Window Building Only** adjust the camera's Field of View is adjusted so that all surfaces in the 3D view are included.

Panning the Display

There are four ways to pan the display without changing the zoom factor.

Using the Scroll Bars

One method is to use the scroll bars on the right and bottom edges of the window.
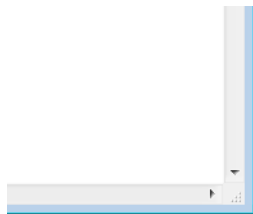
- Drag the square button in the bar itself in order to pan a larger distance.

- Click the end arrow keys on the scroll bars to shift the display in 12" increments.

Using the Arrow Keys

In floor plan view, the arrow keys on the keyboard work exactly like clicking the arrow buttons on the scroll bar.

Using the Mouse

If you have a wheel mouse, you can pan the display by pressing the middle mouse button, or wheel, and moving the mouse in the direction you would like to pan. When the middle mouse button is held down, the pointer changes to a hand icon.

Mouse drivers sometimes have other functions assigned to the wheel and buttons. These override the Chief Architect Viewer setting.

Using the Pan Window Tool

The **Pan Window** tool works much like the mouse wheel method.

Select **Window> Pan Window** . The pointer changes to a hand icon. Click and drag in floor plan view to pan the window. The command is invoked once and the program reverts to the previously active tool when you release the mouse button.

Swapping Views

There are several ways to switch between open view windows.

• Select **Window> Next Window** or **Window> Previous Window** to cycle through all open views in the order you prefer.

• Press the Ctrl + Tab (Next Window) or Ctrl + Shift + Tab (Previous Window) keys to cycle through all open views.

• A list of all the views currently open is located at the bottom of the Window menu. Each view is identified by its name and what type of view it is. Select one to go directly to that view.

Window Menu Tools

Select **Window** from the menu to access the Window Menu tools, which help you display multiple view windows of your model at the same time.

Select **Window> Cascade** to cascade all open views. See "Cascade" on page 39.

Select **Window> Tile Horizontally** or **Tile Vertically** to tile all open views. See "Tiling Views" on page 41.

Select **Window> Arrange Icons** to arrange all open views that are currently minimized. See "Arrange Icons" on page 42.

Select **Window> Next Window** to switch to the next open view. See "Swapping Views" on page 38.

Select **Window> Previous Window** to switch to the previous open view. See "Swapping Views" on page 38.
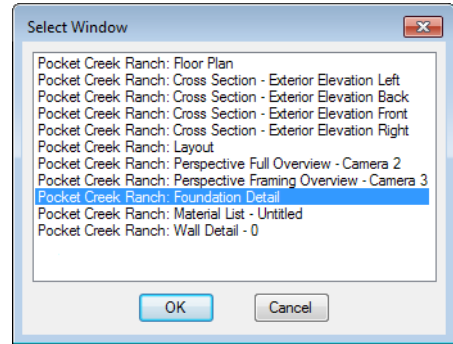
Open View Windows

One layout file can be open at a time, but there is no limit to the number of plan files that can be open. The name of the file and the type of view displays at the top of each view window in its title bar. If the view is saved, its name also displays.

There is no limit to the number of 3D view windows that you can have open at a given time; bear in mind, though, that each window demands use of your computer's resources and that you may see poor performance if too many views are open. See "3D Views" on page 43.

A list of all view windows currently open displays at the bottom of the Window menu. Each view is identified by its name and what type of view it is. A checkmark is beside the view that is currently active. Select one to go directly to that view.

The names of up to eight views can display here. If more than eight view windows are open, **More Windows** is the last item in the menu. Select this option to open the **Select Window** dialog.

Select the name of a view from the list and click **OK** to make it the active view.

Cascade

Select **Window> Cascade** to cascade all open views. Cascade is a Windows function which allows you to organize open

windows in a cascading pattern. Click on any
visible edge to activate that window.
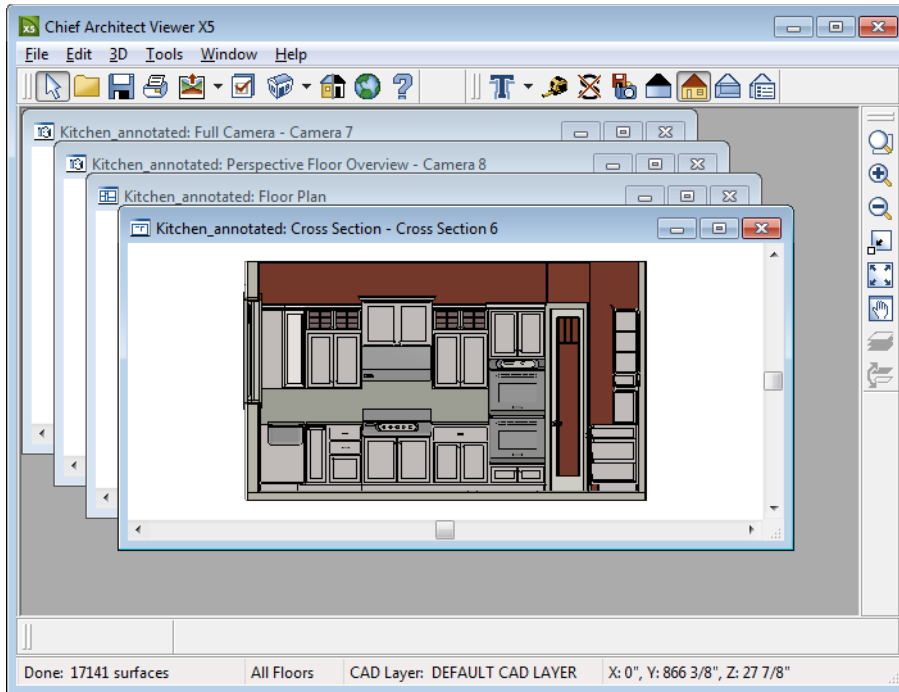
Tiling Views

The window tiling options allow you to display multiple views side by side in the Chief Architect Viewer window.

Select **Window> Tile Horizontally** to display both views in a horizontal orientation.

Select **Window> Tile Vertically** or press Shift + F6 on the keyboard to display both views in a vertical orientation.

To activate a view, click on its title bar or anywhere in the view window. Note that any changes you make are reflected in other views as well.

To end window tiling, click the

Maximize button in the upper right corner of any open view.
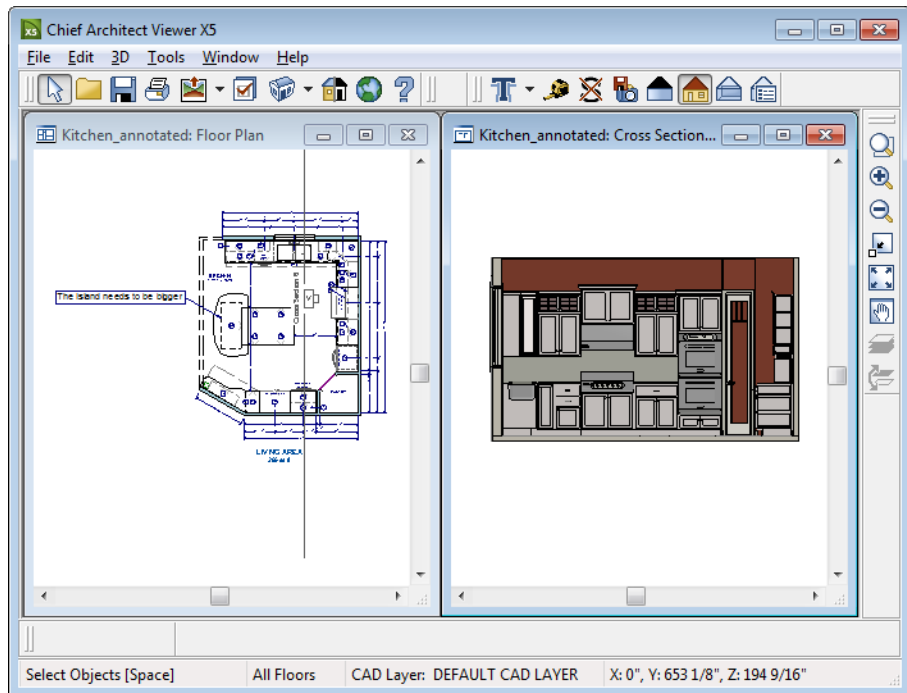
Tiling allows you to see the results of changes in floor plan view in 3D or vice versa, and can also be useful for copying objects from one plan to another.

Arrange Icons

Arrange Icons is a Windows function used when several active windows have been minimized. Select **Window> Arrange Icons** to align the minimized title bars in a row at the bottom of the working desktop. You can then click the minimized title bars to reactivate them or use them for swapping and closing views.
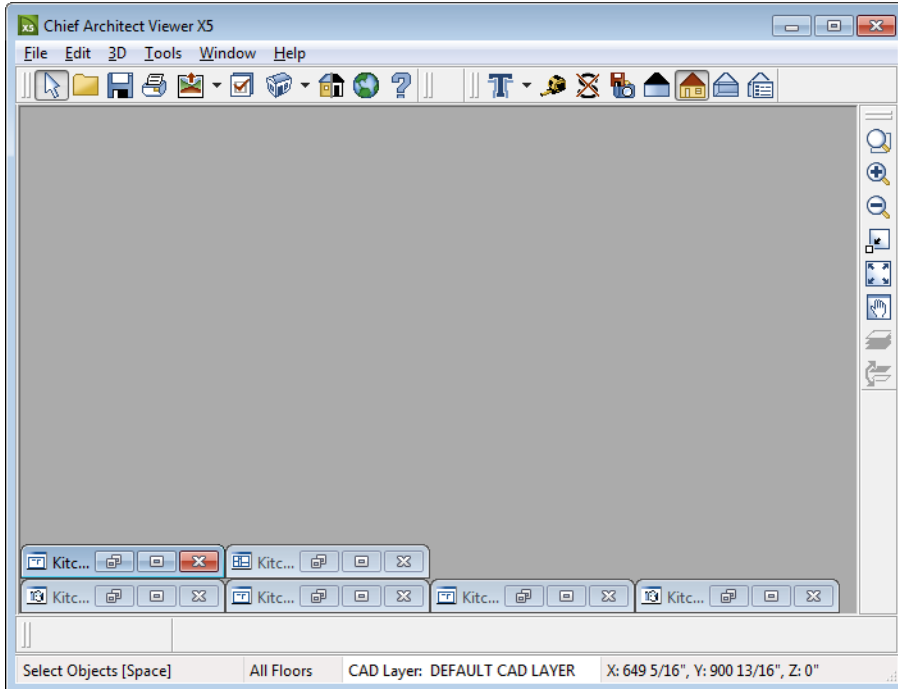
Closing Views

Select **File> Close** or click the ⊠ at the top right corner of a window to close it. If the view is still needed, swap to a different view without closing the current views.

3D Views

Little preparation is needed to create a 3D view of a model: simply click a button to create an overview or click and drag to create a camera or cross section/elevation view.

Chapter Contents

- OpenGL and Hardware
- 3D View Tools
- Creating Camera Views
- Creating Overviews
- Cross Section/Elevation Views
- Displaying 3D Views
- Repositioning Cameras
- Editing 3D Views
- Cross Section Slider
- Saving & Printing 3D Views
- Camera Specification Dialog

OpenGL and Hardware

Chief Architect Viewer features a built in, easy to use rendering engine that makes use of OpenGL rendering technology, which has good hardware support on most video cards.

To take full advantage of the rendering capabilities of Chief Architect Viewer, a graphics card that supports OpenGL hardware acceleration and has at least 256 MB of dedicated video memory is highly recommended. For complex models, an accelerated card generates quality renderings in seconds that might otherwise take minutes

or even hours with a non-accelerated card or chipset.

Vector Views are non-photorealistic views in which objects are drawn using surface edge lines, or vectors. Lighting is not calculated, and materials are represented using pattern lines and solid colors.

Once a 3D view is created, you can specify whether it uses the Standard or Vector View rendering technique. See "Rendering Techniques" on page 60.

3D View Tools

Select **3D> Create Camera View** to display the Camera View Tools.

Camera Views

The **Full Camera** tool creates multi-floor views of the 3D model. It can be used to create interior and exterior perspectives, and is good for displaying cathedral ceilings, roofs, lofts, stairwell openings, and other variation in floor and ceiling levels.

The **Floor Camera** tool creates perspective views of the current floor only. Nothing above the ceiling surface is generated, and neither is anything below the floor.

Overviews

The **Full Overview** tool creates views of the entire model including all floors, ceilings, and the roof.

The **Floor Overview** tool creates views of the current floor without a roof or ceiling.

The **Framing Overview** tool creates views of the framing in the model. Framing must be present in the plan in order for it to display in a framing overview. See "Framing Overview" on page 46.

Cross Section/Elevation Views

Cross Section/Elevation views are the traditional orthographic views often used in drafting. They are scaled and can be annotated. See "Cross Section/Elevation Views" on page 46.

A **Cross Section/Elevation** view displays all floors of the model. If the view is created outside the structure looking toward it, the result is an exterior elevation.

If the view is created inside the structure, or passes through any of the structure, a cross section is created.

Creating Camera Views

Full and floor camera views are created using the same method.

To create a camera view

1. In floor plan view, select the desired camera tool. The mouse pointer displays the camera icon.

2. Click and drag a line to define the view direction.
   - Where your line begins is the camera's position.
   - The line that you drag defines the direction the camera is pointed.
   - The end of the line is the focal point of the view, the point the camera rotates around.
   - The field of view is 45°, which is similar to what the human eye sees or a 50mm camera lens.

1. Camera (click)
2. Line of Sight (drag)
3. Focal Point (release)
Field of View Indicator
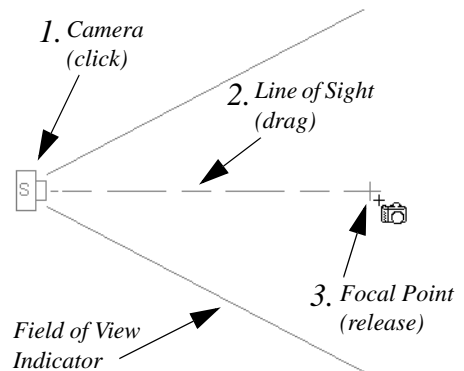
3. When you release the mouse button, a view generates in a new window.

4. Return to the floor plan view. A camera symbol now displays in floor plan view. See "Swapping Views" on page 38.

Creating Overviews

In the Chief Architect Viewer, there are three different overview types: Full, Floor and Framing Overviews.

Overviews generate as soon as you select the tool and are always created at the same angle. The focal point is always located at the center of the model; however, the position of the camera will vary depending

on the size of the 3D model. The larger or more spread out the model, the further away the camera will be from the focal point so that the entire model can be seen in the view.

Once generated, an overview window's title bar indicates view type and a camera symbol representing the overview displays in floor plan view, The overview 'camera' can be

edited much like regular camera views can. See "Editing 3D Views" on page 53.

Full Overview

Select **3D> Create Camera View> Full Overview** to generate an exterior view of the entire model.

To see a different floor, select **Tools> Reference Floors> Up One Floor** or **Down One Floor** . You can also return to floor plan view and make another floor current before generating the Floor Overview

Floor Overview

Select **3D> Create Camera View> Floor Overview** to create a view of the current floor with the ceiling removed and all floors beneath it visible.

Floor Overviews are an effective tool for illustrating traffic flow and the relationships between spaces.

Framing Overview

Select **3D> Create Camera View> Framing Overview** to create a view of the entire model, displaying only framing and the foundation.
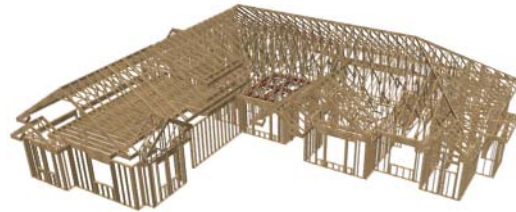
Framing overviews include all floor, wall, and roof framing as well as foundations.

Cross Section/Elevation Views

The **Cross Section/Elevation** tool produces views in which all lines and dimensions are their true lengths, regardless of their distance from the camera.

Cross section/elevation views can be annotated with the Text tools. They are the only 3D views that can have text objects added to them.

Cross Section/Elevation Camera Tools

A **Cross Section/Elevation** view displays all floors of the model. The cross section begins at the point where the camera arrow is drawn and continues through the entire model.

To create a Cross Section/Elevation view

1. Select the **Cross Section/Elevation** tool. The pointer changes to a with crosshairs marking the position of the pointer.
    *   Click and drag a line in floor plan view.
    *   A Camera symbol displays where you click, along with a Cross Section Line indicating the plane of a cross section's cut line.

2. Drag in the direction of the Line of Sight to draw a camera arrow.
    *   Always drag the camera arrow perpendicular to the wall to be viewed.

1. Camera
(click)

2. Line of Sight
(drag)

3. Focal Point
(release)

Clip Plane Indicators
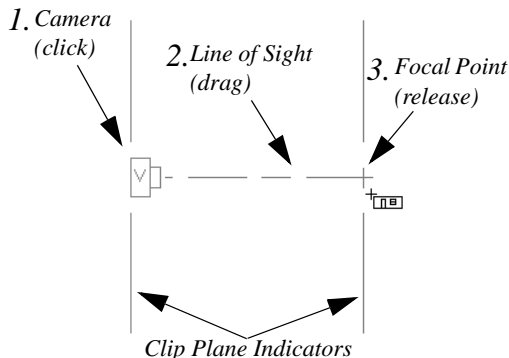
3. When you release the mouse button, the view generates in a new window.

*   If the view is a Backclipped Cross Section, a second Cross Section Line at the end of the Line of Sight indicates the furthest extent of the backclip.

If the Line of Sight does not cut through a 3D object and the object is within the back clipped distance, such as a window shown in elevation, the object retains its 3D definition and can be selected, moved, stretched, or otherwise modified in the view. The 3D model is updated in all views.

Detailing Cross Section/ Elevation Views

The Text tools are accessible in cross section/ elevation views. Text information added to a cross section or elevation view, including dimensions and text, is stored in that view when it is saved. See "Text" on page 63.

Text objects are superimposed on the view and have no effect on the 3D model itself. If Text objects are added to a cross section/ elevation view, the program asks you to save the view before closing the window.

Displaying 3D Views

A variety of tools and settings allow you to control the appearance of your 3D views. There are also numerous ways to adjust the position, focal point and field of view of a 3D view. See "Editing 3D Views" on page 53.

The name of the current plan file and the type of view displays at the top of each view window in its title bar. If a 3D view is saved, its name also displays.

There is no limit to the number of 3D view windows that you can have open at a given time; bear in mind, though, that each window demands use of your computer's resources and that you may see poor performance if too many views are open. See "Open View Windows" on page 38.

Layer Display Options

Which objects display in a 3D view is controlled in the **Layer Display Options** dialog. See "Layer Display Options Dialog" on page 32.

Different view types use different layer sets when they are created. See "Layer Sets" on page 32.

In Floor Plan View

3D cameras are represented in floor plan viewby symbols that indicate the camera's position, field of view and focal point.
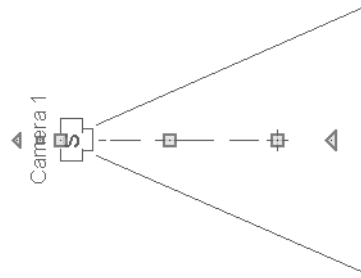
You can also display camera symbols for saved cameras when the "Cameras" layer is turned on. See "Layers" on page 31.

Both saved and unsaved active cameras can have labels indicating the camera number or name. Camera labels are located on the "Cameras, Labels" layer.

Camera labels are numbered sequentially in each plan in the order they were created.

Camera symbols are an on-screen reference: they do not print unless **Print Image** is used.

In Rendered Views

There are a number of factors that contribute to the appearance of rendered 3D views:

*   Select **3D> Camera View Options> Toggle Textures** in a 3D view to turn off the display of material textures. Not available in Glass House or Vector Views.

*   Select **3D>Camera View Options> Final View** or **Final View with Shadows** to regenerate the view . See "Previews vs Final Views" on page 60

In Vector Views

There are also a number of factors that affect the appearance of 3D Vector Views:

- Select **3D> Toggle Patterns** in a Vector View to turn on or off the display of the "Patterns, 3D Views" layer, which controls the display of material pattern lines. See "Layers" on page 31.

- Select **Tools> Display Settings> Color On/Off** to control the display line and fill colors. See "Color On/Off" on page 146.

Delete 3D Surface

The individual surface of an object can be temporarily removed from any 3D view by selecting **3D> Delete Surface** and then clicking on a surface. When the pointer is over a surface, that surface will become highlighted.

Surfaces removed in one view are removed in all 3D views, but are not permanently removed from the model. Continue clicking surfaces to remove them, then select another tool when you are finished.

Surfaces in 3D views are composed of multiple triangles. Hold the Alt key while clicking to delete one triangular face at a time rather than all triangles forming a surface.

Select **3D> Delete Surface** or click the toolbar button to restore the most recently deleted surface. All surfaces can be restored by selecting **Build> Floor> Rebuild Walls/ Floors/Ceilings** or by exiting the 3D view and reopening it.

Rebuild 3D

Select **3D> Rebuild 3D** to regenerate all 3D data asociated with the current plan. All open views will remain open.

Repositioning Cameras

Once a 3D view is created, there are many ways to manipulate the camera location and the direction of its line of site using the mouse, the keyboard, and the menus.

When the keyboard or menu commands are used to move or rotate a camera, the adjustments occur in regular increments. The size of these increments is specified in the **Camera Specification** dialog:

- The **Incremental Move Distance** controls Panning movement and forward and backward Dolly movement.

- The **Incremental Rotate Angle** controls Orbit movement, Tilt movement, and side to side Dolly movement.

See .

Each time you move the camera, the view is updated. If you are using either the toolbar or keyboard to move the camera, you can hold down the Shift key, suppressing the redraw of the view until the Shift key is released and allowing you to move multiple increments more quickly.

> 🔆 Press Ctrl + Alt + S while in a camera view or overview to spin the view. Press Esc to stop the spinning.

Move Camera with Mouse

An active camera's position can be edited using the mouse. Select **3D> Move Camera With Mouse** to access the Move Camera with Mouse modes. These tools are not available in Cross Section/Elevation views.

	Hotkey	Description
	Alt + O	**Mouse-Orbit Camera** lets you move the mouse to rotate the camera around its focal point. The camera's position and direction both change. To continuously rotate the camera around its focal point, click in the 3D view, drag the mouse, and release the mouse button to "throw" the view. Click again in the view to stop it from rotating.
	Alt + P	**Mouse-Pan Camera** lets you move the mouse to move the camera up, down, left and right. The camera's position changes, but its direction does not.
	Alt + D	**Mouse-Dolly Camera** lets you move the mouse up and down to move the camera forward and backward. Move the mouse left or right to rotate the camera side to side.
	Alt + T	**Mouse-Tilt Camera** lets you move the mouse to tilt the camera in any direction while staying in the same location.
		3D Center Camera on Point lets you focus the camera at a particular point in the scene. This also sets the camera center so that future use of **Mouse-Orbit Camera** rotates around that point. To use the **3D Center** tool, activate the tool and then click on any object in the scene.

Move Camera with Arrow Keys

An active camera's position can be changed using the arrow keys on your keyboard. **Select 3D> Move Camera with Arrow Keys** to access Move Camera with Arrow Key modes. These tools are not available in Cross Section/Elevation views.

These modes use the **Incremental Move Distance** and **Incremental Rotate Angle** set

in the active 3D view's **Camera Specification** dialog.

- **Arrow-Orbit Camera** lets you use the arrow keys to rotate the camera around the current focal point. The camera's position and direction both change.

- **Arrow-Pan Camera** lets you move the camera up, down, right, and left using the arrow keys. The camera's position changes, but its direction does not.

- **Arrow-Dolly Camera** lets you move the camera forward and back using the up and down arrow keys, and rotate side to side using the left and right arrow keys**.**

- **Arrow-Tilt Camera** lets you use the arrow keys to tilt the camera up, down, or side to side to change the focal point. The camera's direction changes, but its position does not.

Move Camera Tools

Select **3D> Move Camera** in a 3D view to access these tools. These tools change the active camera's position, but not its direction and are not available in Cross Section/Elevation views.

These tools use the **Incremental Move Distance** set in the active 3D view's **Camera Specification** dialog.

	Hotkey	Description
	F	**Move Camera Forward** moves the camera and its focal point forward.
	B	**Move Camera Back** moves the camera and the focal point back.
⬅	L	**Move Camera Left** moves the camera and the focal point to the left in a line perpendicular to the line of sight.
➡	R	**Move Camera Right** moves the camera and the focal point to the right in a line perpendicular to the line of sight.
↑	U	**Move Camera Up** moves the camera and the focal point up.
↓	D	**Move Camera Down** moves the camera and the focal point down.

Orbit Camera Tools

Select **3D> Orbit Camera** in a 3D view to access these tools. Orbiting the camera rotates it about the focal point

using the **Incremental Rotate Angle** set in the active view's **Camera Specification** dialog.

These tools are not available in Cross
Section/Elevation views.

	Hotkey	Description
	I	**Move Camera In** moves the camera closer to the focal point along the line of sight. The camera cannot move past the focal point using this tool.
	O	**Move Camera Out** moves the camera away from the focal point along the line of sight.
		Orbit Camera Upward rotates the camera up about the focal point. The camera cannot rotate past a vertical line looking straight down on the focal point.
		Orbit Camera Downward rotates the camera down about the focal point. The camera cannot rotate past a vertical line looking straight up at the focal point.
		Orbit Camera Left rotates the camera to the left about the focal point.
		Orbit Camera Right rotates the camera to the right about the focal point.

Tilt Camera Tools

Select **3D> Tilt Camera** to access these tools. Tilting keeps the camera in one place and pivots the camera about its vertical or horizontal axis. This movement uses the **Incremental Rotate Angle** set in the active view's **Camera Specification** dialog and is similar to tilting your head up and down or turning it side-to-side.

These tools are not available in Cross Section/Elevation views.

	Hotkey	Description
		Tilt Camera Upward tilts the camera up while keeping it in the same location. The camera cannot tilt beyond the vertical position.

	Hotkey	Description
		Tilt Camera Downward tilts the camera down while keeping it in the same location. The camera cannot tilt beyond the vertical position.
		Turn Camera Left turns the camera to the left while staying in the same location.
		Turn Camera Right turns the camera to the right while staying in the same location.

View Direction Tools

The **View Direction Tools** allow you to view the model from a specific direction in a camera view, overview, or cross section elevation view. While one of these views is active, select **3D> View Direction** to access these tools.

	Description
	Front View creates a front view of the model.
	Back View creates a back view of the model.

	Description
	Top View creates a top view of the model.
	Bottom View creates a bottom view of the model.
	Left Side View create a left side view of the model.
	Right Side View create a right side view of the model.
	Restore Original View restores the original view position.

Editing 3D Views

In addition to its position and direction, there are other ways to modify a 3D view.

In the Specification Dialog

You can make adjustments to a camera in the **Camera Specification** dialog. This dialog is particularly helpful for making fine adjustments to the camera's position, appearance, and other attributes. See "Camera Specification Dialog" on page 57.

Tile a 3D view and the floor plan view
and use the camera movement tools to
see how they affect the camera. See "Tiling
Views" on page 41.

Using the Edit Handles

Return to floor plan view without closing the
3D view. See "Swapping Views" on page 38.

Using the **Select Objects** ![icon] tool, select the
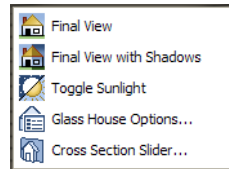camera object. When a camera symbol is
selected it displays four edit handles.

Camera 1 — *Line of Sight*

Move

Focal Point

Rotate
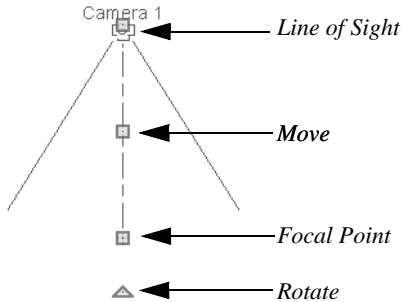
• Drag the **Line of Sight** handle to change
  the camera angle without moving the
  focal point.

• Drag the **Move** handle to relocate the
  camera while maintaining its relative
  angle.

• Drag the **Focal Point** handle to reposition
  the focal point and change the line of
  sight without moving the camera.

• Drag the **Rotate** handle to rotate the cam-
  era's line of sight about its center.

The 3D view corresponding to the camera
symbol reflects changes made to the symbol
in floor plan view.

Multiple camera symbols can be selected;
however, their editing options are limited to
being moved, rotated, and deleted.

Using the Contextual Menu

In a 3D view, right-click in an empty space in
which the backdrop or background color
displays to access the contextual menu. See
"Contextual Menus" on page 12.

Final View
Final View with Shadows
Toggle Sunlight
Glass House Options...
Cross Section Slider...

• In Vector Views, the options are a selec-
  tion of commonly used commands from
  the File, Edit, Tools and Window menus.

• In rendered views, the options are a
  selection of tools and toggles specific to
  rendered views.

Up One Floor/Down One Floor

You can move a camera to a different floor.
While the camera view is active, select
**Tools> Reference Floors> Up One
Floor** ![icon] or **Down One Floor** ![icon].

The position and movement of a camera is
affected by its location within the model.
When the camera is outside a building, its
height is relative to the terrain and follows
the terrain as it is moved. When inside a
building, the camera height is relative to the
floor of the room it is drawn in.

If the camera is on an upper floor and you
move the camera outside of the building, the
camera remains at the same height relative to
the floor it was created on.

Zooming

The **Zoom Tools** are available in all 3D views. See "Zoom Tools" on page 36.

Selecting **Window> Zoom In** , **Zoom Out** or **Fill Window** does not change the camera's location or field of view. Instead, the extents of the view are expanded or cropped.

Field of View

The **Field of View** refers to a camera's field of vision. A wider field of view makes the focal point appear further away, as more of the image is included in the same view window.

In floor plan view, the angled lines of a camera symbol indicate its field of view.

FOV Indicators
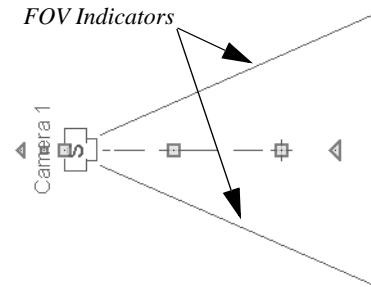
A camera's field of view can be adjusted in the **Camera Specification** dialog. See "Camera Specification Dialog" on page 57.

The field of view can also be adjusted while in a camera view using the keyboard:

• **W** - Increase camera Field of View.

• **N** - Decrease camera Field of View.

Cross Section Slider

Select **3D> Camera View Options> Cross Section Slider** when a camera view or overview is active to open the **Cross Section Slider** dialog.

Note: The Cross Section Slider is not available when the Vector View Rendering Technique is used. See "Rendering Techniques" on page 60.
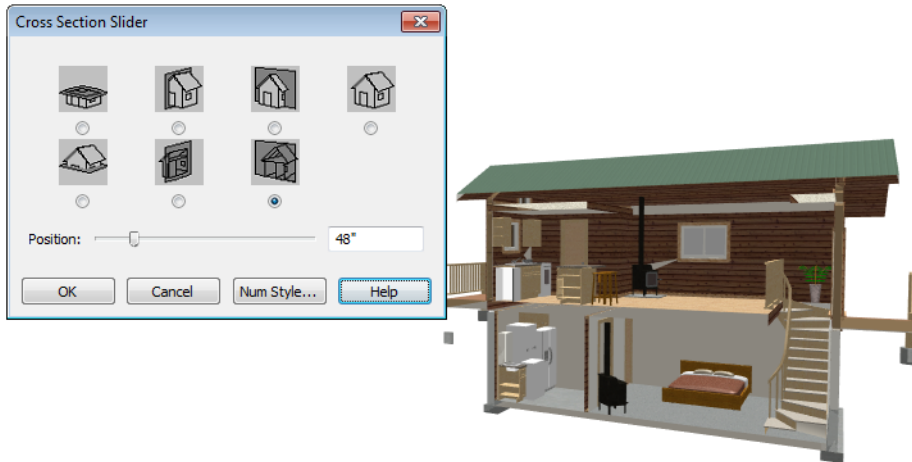
To use the Cross Section Slider

1. Click on the radio button beneath one of the cross section angles to select it.
    •   The option at top right turns off the cutting plane, so no cross section is made.

2. Move the **Position** slider to adjust the position of the cutting plane.

3. You can position the cutting plane with accuracy using the text field to the right of the slider.
    •   This value is measured from the edge of the model that is cut first by the selected cross section angle.

4. Click **OK** to close the dialog.

Saving & Printing 3D Views

3D camera views, overviews and cross section/elevation views can be saved with the plan in which they are created, exported and saved as image files, as well as printed.

Saving 3D Views

Select **3D> Save Active Camera** to save the current camera in the plan. You can also save a camera view by checking the **Saved** box in the **Camera Specification** dialog. See "Camera Specification Dialog" on page 57.

In addition, ifText objects are drawn in a cross section/elevation view, you will be prompted to save the view when you close it. Any Text objects added to a cross section/ elevation view are saved with the view as part of the plan file.

Activating Saved Views

There are three ways to open a saved 3D view:

- Select the camera symbol in floor plan view and click the **Open View** edit button.

- Double-click the camera symbol using the **Select Objects** tool.

- Right-click on it and select **Open View** from the contextual menu.

Unsaved cameras that are open in another view window can also be activated using the **Open View** edit button.

If you open a saved camera view and then modify its location or direction using any of the tools available in that view, the program will confirm whether you want to re-save the camera using these new settings when you close it. See "Repositioning Cameras" on page 49.

Exporting 3D Views

All 3D views can be exported and saved as .bmp, .jpg, .png, or .tif files. Select **File> Export> Picture** to save the current screen image as an image file. See "To export a picture" on page 75.

In addition, Vector Views can be exported and saved as **.emf** files. See "Metafiles" on page 76.

Once saved, a picture can be opened and converted into many other formats using a graphics program.

When a picture is exported, it is assigned the same size as it displays on screen. You can change the size of the view window to create a smaller or bigger picture.

Printing 3D Views

Since all 3D views other than Vector Views are created using pixels instead of lines, **File> Print> Print Image** must be used when printing. **Print Image** is a special Chief Architect Viewer function that prints the screen in picture format.

The quality of your print image is affected by your current window size and screen resolution. To maximize the quality of your printed image, generate it in full screen size and use the maximum screen resolution.

Camera Specification Dialog

The **Camera Specification** dialog can be accessed in floor plan view by selecting a camera symbol and clicking the **Open Object** edit button. See "In Floor Plan View" on page 48.

This dialog can also be accessed while a camera view or overview is active by selecting **3D> Edit Active Camera**.

The selected view's specific type is indicated in the dialog's title bar: the specification dialog for a **Full Camera**, for example, is named **Full Camera Specification**.
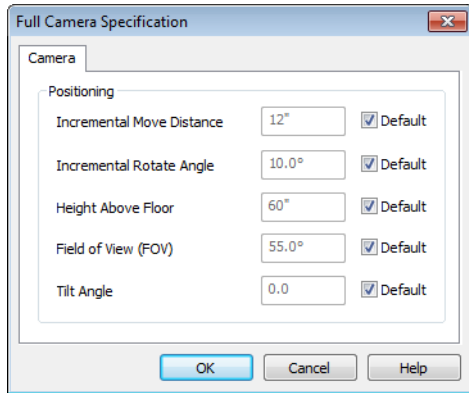
Some settings only affect some types of views. Depending on the type of camera view selected, not all the settings may be editable.

To change a setting, first uncheck **Default**, then type a new value in the text field.

- The **Incremental Move Distance** controls how far the camera moves each time you Pan in any direction or Dolly forwards or backward. For interior views a small number is good, but for exterior you may want a larger increment.

- The **Incremental Rotate Angle** defines how many degrees the camera rotates each time you Tilt, Orbit, or Dolly side to side. A setting of 90° would make one full rotation in four moves.

- The **Height Above Floor** defines the height that the camera is above the floor level for the current floor.

- The **Field of View** defines the camera's field of vision in angular degrees. See "Field of View" on page 55.

> You can increase a camera's Field of View when the view is active by pressing the W key, or decrease the Field of View by pressing the N key.

- The **Tilt Angle** determines the angle the camera is tilted. The camera maintains its focal point and position in floor plan view, but if the camera is tilted, the focal point is above or below the current camera height.

Rendering

There are a variety of tools available to create 3D views of a model: simply click a button to create an overview, or click and drag to create a camera or cross section/ elevation view. See "3D Views" on page 43.

To improve the quality of the rendering and create a custom look, you can choose from several rendering techniques . From most 3D views, you can create Final views of even higher quality.

Chapter Contents

- Previews vs Final Views
- Rendering Techniques
- Speeding up 3D View Generation

Previews vs Final Views

When a rendered 3D view is first created, it uses quality settings that allow the view to generate quickly but with reasonable quality.

Final Views produce much higher quality images that are more suitable for printing or saving as graphics files. Final Views often take significantly longer to generate than Previews, so the 3D view reverts back to the Preview settings as soon as anything is changed within the view.

When you have finished making adjustments in the 3D view, select **3D> Camera View Options> Final View** or **Final View with Shadows** .

Final View and **Final View with Shadows** are not available in Vector Views. See "Rendering Techniques" on page 60.

Rendering Techniques

Any cross section/elevation, camera view, or overview can be generated using one of several rendering techniques to produce views for a range of different purposes. When a 3D view is active, select **3D> Rendering Techniques** to access these tools.

Standard Rendering

Standard rendering is a photo-realistic technique that represents materials using textures, models lighting, and can also display shadows. Surface edge lines are not drawn and no special colors or effects are applied. Lighting is limited to the room containing the camera and the capabilities of your video card.
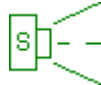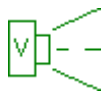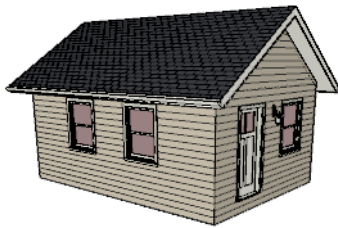
In floor plan view, the camera symbol for a view using the **Standard** technique displays an S in its center. See "Displaying 3D Views" on page 48.

Standard rendering requires a video card that supports OpenGL 2.0.

Vector View

In Vector Views, surface edge lines are drawn and pattern lines and colors are used to represent materials. Textures and lighting are not used, and special colors and effects are not applied.
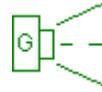
In floor plan view, the camera symbol for a view using the **Vector View** technique displays a V in its center.

Glass House

Glass House rendering uses different shades of a single color to display the model with surface edge lines and semi-transparent surfaces. Lighting is not modeled, and materials are not represented, so neither pattern lines nor textures are used.
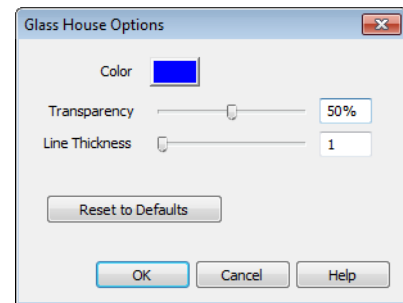
In floor plan view, the camera symbol for a view using the **Glass House** technique displays a G in its center.

Glass House Options

You can modify the appearance of Glass House Views by selecting **3D> Rendering Techniques> Glass House Options**.

- Click the **Color** bar to select a color for the semi-transparent surfaces and lines in a Glass House view. See "Color Chooser Dialog" on page 14.

- Click **Reset to Defaults** to restore the default settings used when the Glass House view was first created.

Speeding up 3D View Generation

Depending on the speed of your processor, how many cores your processor has, and your computer's video memory, a 3D view may generate in a few seconds or less.

When you have a large, complex model with a lot of detail, it may take a few minutes to generate a 3D view of everything in the

model. During this process, progress information may display in the Status Bar and in a message window.

There are several ways to speed up the generation time of views.

Turn Off Layers

The display of objects in 3D views can be turned on or off by layer in the **Display Options** dialog. Turning off the display of unneeded objects in 3D views can speed up 3D view generation time. See "Layer Display Options Dialog" on page 32.

Halt Generation with Esc Key

Using the Esc key, you can interrupt the modeling process at any point and display the incomplete model "as is." This is particularly helpful when you just need to reorient a model on the screen for a specific angle or view.

The Esc option allows you to place the view quickly, then press the F5 function key to refresh the display with all 3D faces intact.

Text

Text is an simple and effective way to communicate your thoughts and suggestions regarding a drawing. Text can be added in floor plan and cross section/elevation views, and to layout pages.

Text lines with arrow can be attached to text objects, allowing you to direct attention to specific plan details.

Chapter Contents

Creating Text

Text can be created in floor plan view, in cross/section elevation views using the Vector View Rendering Technique, and on layout pages.

Once created, text can be selected and edited in a variety of ways. See "Editing Text" on page 69.

1. *To create Rich Text* Select **Tools> Rich Text** [T].

2. Click in the drawing area, and the Rich **Text Specification** dialog will open. See "Rich Text Specification Dialog" on page 64.

3. Type or paste the desired text into the Text Field.

4. Use the options in the dialog to change the font, style and size of any portion of the text.

5. When you are finished, click OK. The **Rich Text** [T] tool remains active, so you can create additional text objects if you wish.

You can also create lines with arrows connecting the text that you create to items in the drawing. See "Text Arrows" on page 71.

Displaying Text

As with other types of objects, the display of Text objects is controlled in the **Layer Display Options** dialog.   See "Layer Display Options Dialog" on page 32.

Text objects can only be displayed in views where text can be created.

The display attributes of each individual text object can be controlled independent of the

layer it is placed on. See "Rich Text Specification Dialog" on page 64.

The display attributes of individual text objects, such as color and size, can be set in their specification dialogs. See "Rich Text Specification Dialog" on page 64 and "Line/ Polyline Specification Dialog" on page 72.

Rich Text Specification Dialog

The **Rich Text Specification** dialog opens if you select the **Rich Text** tool and then click once in the drawing area.

You can also open this dialog by selecting a

Rich Text object, then clicking the **Open Object** edit button.

Text Lines with Arrows have their own specification dialog. See "Line/Polyline Specification Dialog" on page 72.

Text Tab

The settings on the Text tab allow you to type the selected Rich Text object's content and control many aspects of its appearance, including its font, size, color and style.

You can specify the appearance of the text before typing, and can also select and change

the attributes of all or portions of the text content after it is typed. To change text that already exists, simply highlight it using the mouse and/or the Shift + arrow keys and then make any needed changes to its attributes.

Rich Text Specification
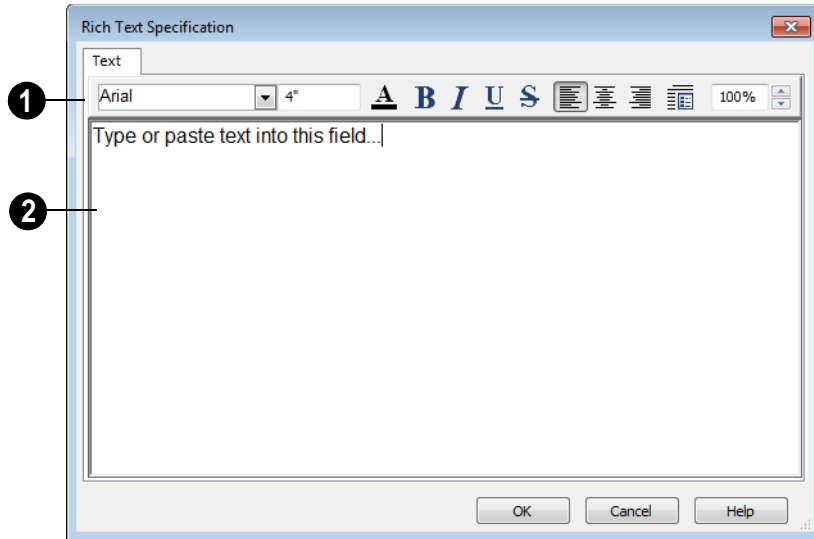
1 Use the options on the Edit Bar, which displays above the Text Entry field, to change the font, style and size of the text.

Select the desired options before typing to affect the text as it is typed, or select some or all of the text and then specify which options to apply to it.

- Select a **Font** from the drop-down list.
- Specify the **Text Size** in drawing units. When imperial Inches or Feet and Inches are used, accuracy to 1/128" is possible.
- Click the **Color** button to specify the color of the selected or subsequently typed text.
- Click the **Bold** button to specify the selected or subsequently typed text as bold.
- Click the **Italic** button to specify the selected or subsequently typed text as italic.

- Click the **Underline** button to specify the selected or subsequently typed text as underlined.
- Click the **Strikethrough** button to selected or specify the subsequently typed text as stricken-through.
- Click the **Align Left**, **Align Center**, or **Align Right** button to specify the how the selected or subsequently typed text is aligned.
- Click the **Paragraph Options** button to specify the selected paragraph's alignment, spacing and bullets or numbering in the **Paragraph Options** dialog.
- Specify the **Zoom** factor of the selected text by typing a percentage value in the text field or clicking the up/down arrows. This setting only affects the text as it appears in this dialog.

Note: Some fonts cannot be drawn at certain zoom factors. When this is the case, the appearance of the text will not change.

2 Type or paste text in the Text Entry field. See "Copy, Cut and Paste" on page 70.

Right-click in the Text Entry field to access a contextual menu from which you can select Cut, Copy, Paste and Select All. See "Contextual Menus" on page 12.

To edit text in the entry field, click and drag to highlight any portion of it and then use the tools on the Edit Bar as needed.

Paragraph Options Dialog
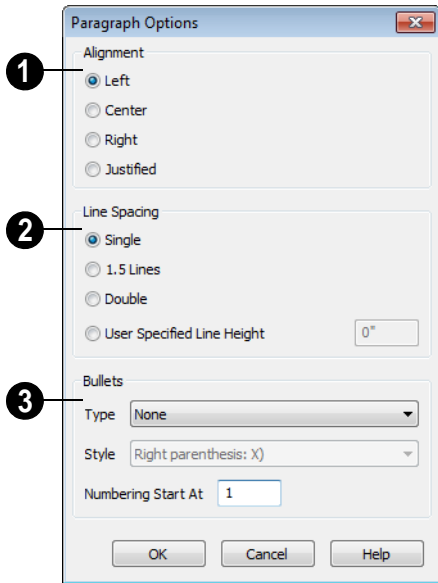
1 Specify the **Alignment** of the selected paragraph(s).

2 Specify the **Line Spacing** of the selected paragraph(s).

• Click the radio button beside **Single**, **1.5 Lines**, **Double** or **User Specified**.

• If you select **User Specified Line Height**, type the desired height for each line of text in the selected paragraph(s). For best results, this value should be at least as much as the largest character size used in the selected paragraph(s).

3 Specify the appearance of **Bullets** and numbering in the selected paragraph(s).

• Select the desired bullet, numbered or lettered **Type** from the drop-down list.

• Select the desired punctuation **Style** for the selected numbered or lettered Type. Only available when a numbered or lettered Type is selected.

• **Numbering Start At** - Specify the number assigned to the first numbered or lettered paragraph in the selected text object. Value must be 1 or greater.

To adjust the size of bullets

1. Click at the end of a bulleted paragraph to position your cursor there.

2. Hold down the Shift key and press the right arrow key once to highlight the end of the paragraph.

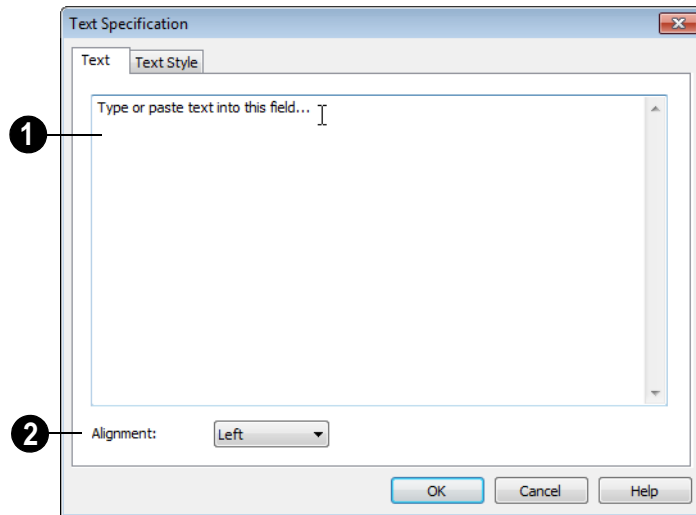3. Specify the desired bullet size in the text size field at the top of the Text tab.

Text Specification Dialog

The **Text Specification** dialog opens if you select a simple **Text** object in a legacy plan or layout file created in Chief Architect X1 or prior and click the **Open Object** edit button.
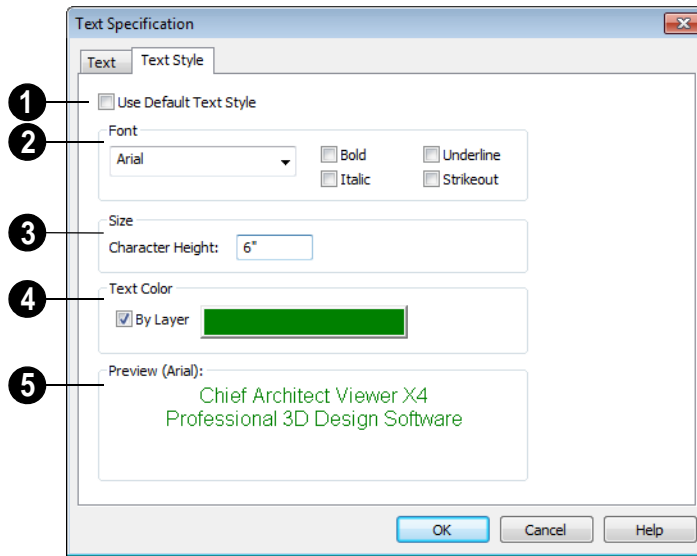
Text Tab

Enter text in the **Text Entry** field.

Select an **Alignment** option from the drop-down list to apply to the text.

Text Style Tab

1 Uncheck **Use Default Text Style** to enable the settings that follow. When it is checked, information about the Text Style that is assigned to the selected object displays for reference.

2 Specify the attributes of the selected Text Style's **Font**.

• Select a font from the drop-down list.

• The text styles **Bold**, **Underline**, **Italic**, and **Strikeout** are available. Check any of the boxes to apply that style.

3 Specify the **Size** of text using the selected Text Style.

• Enter the **Character Height** in drawing units. This height is subject to the current drawing scale. When imperial Inches or

Feet and Inches are used, accuracy to 1/128" is possible.

4 Specify the selected Text Style's **Text Color**. When Use Custom Text Style is not selected above, a Text Color does not display here for reference.

• When **By Layer** is checked, text uses the line color assigned to the layer it is located on. See "Layers" on page 31.

• Uncheck **By Layer**, then click the **Color** bar to select a different color. See "Color Chooser Dialog" on page 745.

5 A preview of the Text Style currently assigned to the selected object displays here.

Editing Text

Once created, **Rich Text** ![T] objects and **Text Lines with Arrows** ![arrow] can be selected and edited using the edit handles the edit toolbar buttons, and their specification dialogs. See "Rich Text Specification Dialog" on page 64.

To select a **Rich Text** ![T] object or **Text Line with Arrow** ![arrow], click on it using either the tool used to create it or the **Select Objects** ![select] tool.

Sometimes, multiple **Rich Text** ![T] objects or **Text Lines with Arrows** ![arrow] are located close to one another, making it difficult to select a particular object. Click as close as you can to the desired object, then click the **Select Next Object** ![select] edit button or press the Tab key until the object is selected.

Editing Text Attributes

Most text attributes, including the font, size, style, and the content itself, are edited in the **Rich Text Specification** dialog.

In order to edit the attributes of an existing **Rich Text** ![T] object, you must select some or all of the text before making changes. See "Text Tab" on page 64.

To edit Rich Text attributes

1. Select a **Rich Text** ![T] object and click the **Open Object** ![open] edit button.

2. On the Text tab of the **Rich Text Specification** dialog, click and drag to select some or all of the text typed into the Text field.
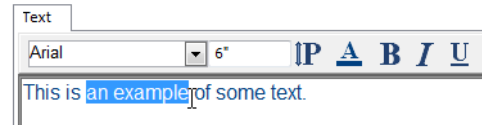
3. With some or all of the text selected, change any of the attributes available along the top of the tab, including the font, size, color, and style.
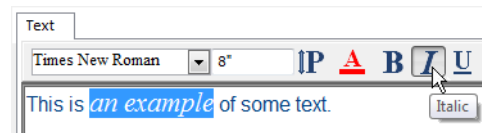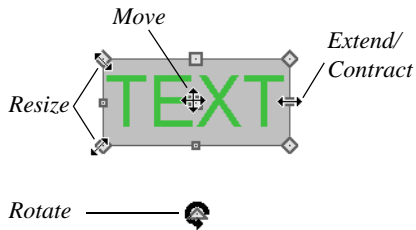

4. As changes are made, the selected text updates. Only the selected text is modified.
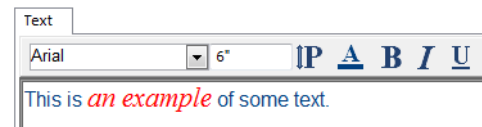

Using the Mouse

When a **Rich Text** ![T] object or **Text Line with Arrow** ![arrow] is selected, it displays edit handles. Use the edit handles to resize, extend/contract, move, and rotate the selected object.

Move

Extend/ Contract

Resize

TEXT

Rotate

As a **Rich Text** box is made smaller using an edit handle, not all of the text may be visible.

Text Lines with Arrows can also be connected to form polylines that can be reshaped using the edit handles.

Change Angle/ Resize

Rotate

Move
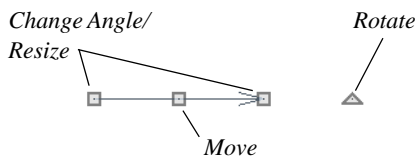
Using the Edit Tools

A selected **Rich Text** object or **Text Line With Arrow** can be copied or deleted using the edit toolbar buttons.

To copy and paste an object

1. Click on the text or text line with arrow to select it.

2. Click the **Copy/Paste** edit button.

3. Click anywhere in the drawing area to paste the copy at that location.

To make multiple copies, click the **Sticky Mode** edit button before clicking in the drawing area. With **Sticky Mode** enabled, you can continue to click to paste as many copies of the object as needed.

When you are finished, click the **Main Edit Mode** edit button or select another tool.

You can also **Cut** , **Copy** , and **Paste** a selected object by selecting these options from the **Edit** menu. These are the same as the standard Windows commands.

To delete an object, select it and click the **Delete** edit button or press the Delete key on your keyboard.

Resizing Text

The character height of **Rich Text** objects can be specified in their specification dialogs.

Aligning Text

The text content of a text object can be aligned to the left, right, center or justified in the **Rich Text Specification** dialog. See "Text Tab" on page 64.

Copy, Cut and Paste

Copy, Cut and Paste of text into and out of the **Rich Text Specification** dialog can be accomplished using keyboard hotkeys:

- Press Ctrl + X to Cut the selected text and save it to the Windows clipboard.

- Press Ctrl + C to Copy the selected text and copy it to the Windows clipboard.

- Press Ctrl + V to paste your last cut or copied selection in a new text object.

Copy, Cut and Paste use the Windows clipboard, making it possible to to transfer

text between text objects, between Chief Architect Viewer files, from a plan or layout into another application, or vice versa.

Copying & Pasting Text

The Copy, Cut and Paste commands use the Windows clipboard, making it possible to transfer text between text objects, between Chief Architect Viewer files, from a plan or layout into another application such as a text editor or spreadsheet program, or vice versa.

Cut, Copy, and Paste can also be accessed from the Edit menu of many applications, including Chief Architect Viewer. These menu commands are not available when the text specification dialogs are open, but you can use the associated hotkeys.

To Copy, Cut and Paste text

1. On the Text tab of either text specification dialog or in another program altogether, highlight the text you wish to cut, copy or paste.

2. Press Ctrl + X to **Cut** the selected text out of its original location and save it to the Windows clipboard.

3. Press Ctrl + C to **Copy** the selected text to the Windows clipboard without removing it from its original location.

4. Open the text object or a file in another application and click to place your cursor in the Text field, writing area, or spreadsheet cell.

5. Press Ctrl + V to **Paste** the copied text at the location of your cursor.

Bear in mind that when text is copied and pasted, its formatting is not always retained. The results depend on the program or type of text object in which the content was created as well as the type of text object into which it is pasted.

Pasting into Rich Text

Text pasted into a **Rich Text** object from another source will retain most of its custom formatting.

Text pasted into a **Rich Text** object from a spreadsheet program retains basic column and row information. Column width cannot be adjusted; however, as you add or remove text froma cell, row height will increase or decrease to accomodate your changes.

The background colors of two or more cells copied from a spreadsheet application will be retained if pasted in to **Rich Text**; however, once pasted background color cannot be edited.

Text Arrows

Text arrows can be used to connect text objects to details of interest in your drawing.

Text arrows can be snapped together to form open or closed polylines. If two lines with

arrows meet within the bounding box of a text object, however, they will not join. This allows you to attach multiple, separate text arrows to a single text object.

Lines with arrows can be independent or attached to other objects. Arrows attach to closed polyline-based objects along their edges, but can attach to an architectural object anywhere within its 2D symbol in floor plan view. If an arrow is attached to text or another object, deleting either the text or the object will also delete the arrow.

Text with Arrow

The **Text with Arrow** tool places a text object with an arrow already attached. This arrow can be selected and edited like any other arrow.

Text Line with Arrow

Text Lines with Arrow can be attached to text and architectural objects by selecting

Tools> Text Line with Arrow and then clicking and dragging to draw a line. There is no limit to the number of text lines with arrows that can be attached to an object.

The endpoints of **Text Lines with Arrows** can be joined to form polylines with corners that can be adjusted using the edit handles.

Auto Positioning Arrows

There are four auto position locations on a text object: one at the midpoint of each side.

The following image illustrates the behavior of auto positioning. When the head of the line with arrow is moved, the tail of the arrow snaps to different auto position locations on the text object, maintaining its connection.
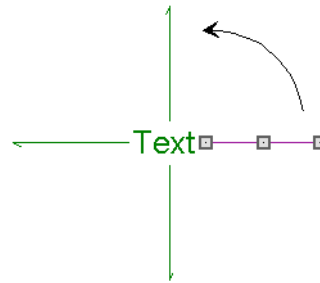
Line/Polyline Specification Dialog

Select a Text Line with Arrow and click the **Open Object** edit button to open the **Line Specification** dialog or the

Polyline Specification dialog (if the object is composed of multiple line segments).

Line Style Tab

The Line Style tab allows you to control the line color and style of the selected line or polyline.

Polyline Specification

Line Style | Arrow
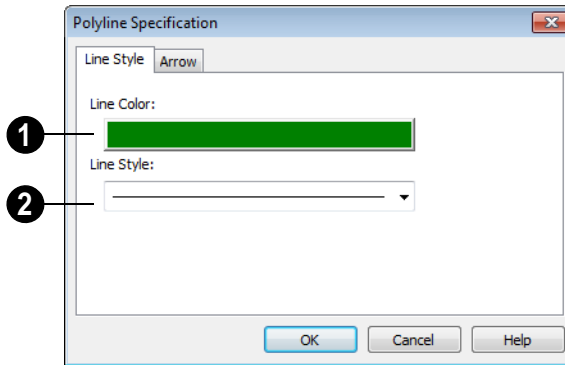
Line Color:

①

Line Style:

②

OK | Cancel | Help

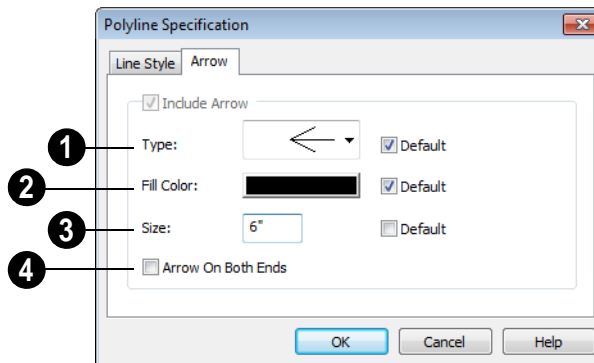**①** Specify the **Line Color** used to display the selected text arrow.

Click the color bar to assign another line color to the selected object only using the **Color Chooser** dialog. See "Color Chooser Dialog" on page 14.

② Specify the **Line Style** used to display the selected object.

Click the drop-down list to select from all available line styles. You can use the keyboard arrow keys to scroll up and down through the options.

Arrow Tab

The Arrow tab is available for open polylines, but not for closed polylines.

Polyline Specification

Line Style | Arrow

Include Arrow

① Type: ☑ Default

② Fill Color: ☑ Default

③ Size: 6" ☐ Default

④ ☐ Arrow On Both Ends

OK | Cancel | Help

① Select an arrowhead **Type** from the drop-down list.

Check **Default** to reset the arrow type.

② Select the **Fill Color** used to fill the arrowheads. See "Color Chooser Dialog" on page 14.
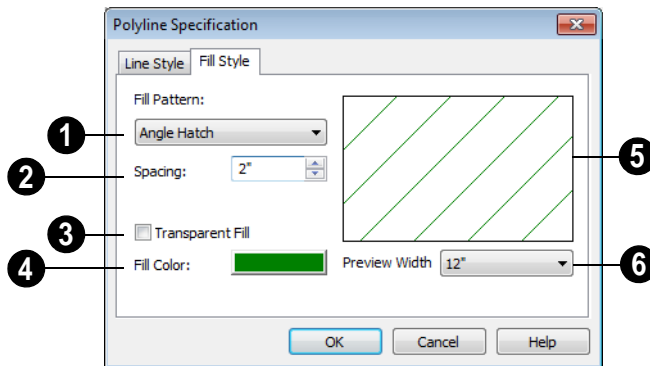
Check **Default** to reset the fill color.

3 Define a **Size** for the arrow(s).

Check **Default** to reset the size.

4 Check **Arrow on Both Ends** to place a head on both ends of the selected arrow(s).

Fill Style Tab

The Fill Style tab is available for closed polylines, but not for open polylines.

1 Select a **Fill Pattern** from the drop-down list.

The options that follow are disabled until you select a pattern other than "None".

2 Define the **Spacing** for the selected fill pattern.

3 Check **Transparent Fill** to make the fill pattern transparent. When checked, any objects behind the fill pattern are visible through it.

4 Click the color bar to specify the **Fill Pattern Color** for fill pattern lines or

solid fill if a solid fill is specified. See "Color Chooser Dialog" on page 14.

5 A preview of the selected pattern displays here. As changes are made to the settings on this tab, it will update.

6 Choose a **Preview Width** from the drop-down list. This value controls how large an area the preview represents. The selected value indicates the length of each side of the preview in actual plan inches (mm).

Pictures, Metafiles, & Walkthroughs

You can save any view using a variety of picture file formats. In addition, Chief Architect Viewer allows you to create virtual tours that can be saved as .**avi** files, shared with others, and played back later.

You can save any 2D or 3D view using a variety of picture file formats that can be opened in other applications.

In addition, if your design professional provided you with one, you can view a 3D walkthrough, which is a video tour of a model.

Chapter Contents
- Pictures
- Metafiles

Pictures

Using the **Export Picture** tool is similar to creating a screen capture of everything in the current Chief Architect Viewer view window. Pictures can be saved in various file formats and used in other applications.

Export Picture is best suited for rendered views. When exporting a line-based view, best results can be achieved by saving it as a Metafile. See "To export a metafile" on page 76.

To export a picture

1. Open the view that you would like to export as a picture file.

2. Zoom, pan or otherwise adjust the view so that what you see on screen suits your needs. See "Displaying 3D Views" on page 48.

3. Select **File> Export> Picture (BMP, JPG, PNG)** in any view to open the

Export Picture File dialog. See "Export-ing Files" on page 20.

The **Copy Region as Picture** 🖻 tool also lets you create a picture file based on the

current view, but allows you to specify what portion of the view is exported. See "Copy Region as Picture" on page 77.

Metafiles

A metafile (**.emf**, **.wmf**) is a special picture file format made up of vectors (lines) that allow the image to be rescaled without loss of quality.

High resolution pictures of line-based views can be exported as a metafile.

Exporting Metafiles

An enhanced metafile (**.emf**) can be exported from any line-based view: that is, from floor plan view and 3D Vector Views.

Only objects that display on screen are included in an exported metafile.

To export a metafile

1. Accurately position the view on screen.

2. Select **File> Export> Metafile (EMF)** ⬆.

3. Drag a marquee ⬚ from corner to cor-ner, defining the area that will included in the metafile.

4. Release the mouse to open the **Metafile Size** dialog.
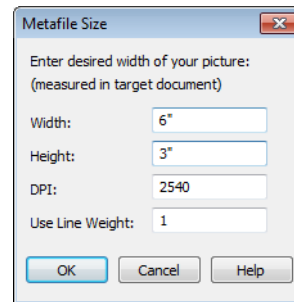
5. Specify the desired **Width** or **Height** of the metafile. When one value is edited, the other changes to maintain its aspect ratio.

   Specify, too, the desired **Dots Per Inch (DPI)** for the metafile. A larger value results in a higher quality metafile, but also a larger file size.

6. When a metafile is exported from a 3D Vector View, you can also specify the printed thickness of lines in the view. To increase the printing line weight, type a larger number in the **Use Line Weight** field. See "Vector View" on page 60.

   Metafiles exported from floor plan view use the line weights defined in the **Layer Display Options** dialog. See "Layer Display Options Dialog" on page 32.

Metafile Size

Enter desired width of your picture: (measured in target document)

Width: 6"
Height: 3"
DPI: 2540
Use Line Weight: 1

OK   Cancel   Help

7. Click OK to open the **Export Metafile** dialog, which is a typical Save As dialog. See "Saving a Plan or Layout File" on page 19.

8. Enter a name and location on your computer for the metafile, then click **Save**.

Copy Region as Picture

You can copy any portion of the screen and save it as a picture file using the **Copy Region as Picture** tool.

To use Copy Region as Picture

1. Open the view that you would like to copy all or part of as a picture.

2. Select **Edit> Copy Region as Picture** . Your pointer displays a marquee icon.

3. Click and drag a rectangular selection marquee around the desired region.

4. The selection is copied to the Windows clipboard.
   - If the current view is vector-based, the **Metafile Size** dialog displays because metafiles are better suited for line-based pictures. See "Metafiles" on page 76.
   - If the current view is a rendered view, the region is sent directly to the Windows clipboard.

5. From there, the picture can be pasted into another program.

Walkthroughs

A 3D Walkthrough is a series of pictures saved as an **.avi** file that can be played like a video. If your design professional gave you a walkthrough of a model, you can view it using a media player such as Windows Media Player.

To play a walkthrough .avi, begin by copying the file to your computer's hard drive. Then, either:

- Double-click on the .avi file to launch your default media player and view the walkthrough video.

- Launch the media player of your choice and use it to play the walkthrough video.

Layout

The Chief Architect Viewer can be used to view and add commentary to working drawings in layout file format created in Chief Architect.

Chapter Contents

Viewing a Layout File

To open a layout file, select **File> Open Layout** . Browse to a directory and select the layout file to open. See "Opening a Plan or Layout File" on page 18.

Only one layout can be open at a time. When a layout file is open, it is listed at the bottom of the Window menu as an open view.
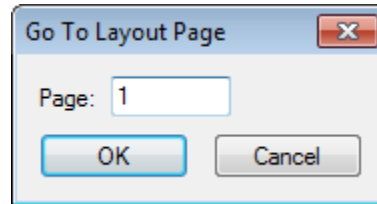
The Current Page

The current page is indicated at the center of the Layout Page buttons. When a layout file is first opened, the current page is page one.

To navigate between layout pages

• Click the arrow buttons on either side of the **Layout Page** button.

• Click the **Current Page** number between the arrows to open the **Go To Layout Page** dialog. Enter a page number and click **OK**.

• Select one of the options from the **Tools> Layout>** menu.

• Press Shift + N (up one page) or Shift + M (down one page) on the keyboard.

Note: Layout pages do not print if they are blank, even if a border and title block are present.

Text in Layout

Text and Text Lines with Arrows can be added directly to any layout page.

Text objects created in layout can be selected and edited just as they can in other views. See "Editing Text" on page 69.

Layout Page Display Options

Select **Tools> Display Options** from a layout file to open the **Layout Page Display Options** dialog.

The **Layout Page Display Options** dialog is similar to the **Layers Display Options** dialog, but controls only the display of text objects drawn on the layout page.

For information about how to use this dialog, see "Layer Display Options Dialog" on page 32.

Printing Layout Files

Printing layout files is similar to printing directly from a view in a plan file. See "Printing Directly from a View" on page 85.

Select **File> Print> Print** to open the **Print** dialog. See "Print Dialog" on page 86.

Printing

The Chief Architect Viewer provides a variety of printing options, allowing you to print up to 11" x 17" in size.

The Chief Architect Viewer also allows you to save your drawings in pdf file format that can then be sent to a printing service.

⚠ Screen captures are provided for illustrative purposes only and are not an endorsement of any products.

Chapter Contents

Clearing Printer Information

Some information specific to individual printers, such as available paper sizes, is saved with each plan file. You can select

File> Print> Clear Printer Info to clear the printer-specific information stored with the plan file.

The Printing Tools

Select **File> Print** to view the Print Tools submenu.

Print Preview - Shows how the current view will appear when printed. See "Print Preview" on page 84.

Print - Prints the current floor plan view, Vector View, or layout sheet. See "Print Dialog" on page 86.

Print Image - Prints a screen view including images, textures and backdrops. See "Print Image Dialog" on page 88.

Clear Printer Info - Clears the printer information associated with the current page setup.

Display Options and Printing

The display of objects in views can be used to affect the printed output. Some display options allow you to preview the printed output on screen before any paper is used.

Objects must be visible in order for them to print; but not all items that are visible print.

- Camera symbols in floor plan view, for example, do not print.
- The Reference Display does print if it is visible. See "Reference Display" on page 28.

To see how your printed output will appear on paper, select File> Print> Print Preview.

Displaying Objects

You can control the display of objects when printing directly from a view in the **Layer Display Options** dialog. See "Layer Display Options Dialog" on page 32.

Print Preview

Select **File> Print> Print Preview** for an on-screen representation of how the current view will appear when printed. Print Preview is only available in views that can be scaled.

Objects such as camera symbols that do not print do not display in **Print Preview**. Text and dimension objects appear on-screen as they will on the printed page.

Printing Directly from a View

To print directly from any floor plan view or cross section/elevation view, choose **File> Print> Print**. See "Print Dialog" on page 86.

Rendered 3D views can be printed using **File> Print> Print Image** . See "Print Image Dialog" on page 88.

Printing Across Multiple Pages

When printing directly from a floor plan view, cross section/elevation view, or layout it is possible to print at a scale that does not fit the drawing on one page.

To see on-screen what the drawing will look like when printed, select **File> Print> Print Preview** and then **Window> Fill Window** . Grey lines across the drawing sheet indicate where the page breaks will occur. See "Print Preview" on page 84.

To print across multiple pages

1. Select **File> Print> Print Preview** to display the white rectangle representing the printer paper. See "Print Preview" on page 84.

2. Click the **Select Objects** button, then click near an edge of the printer paper rectangle to select it.

When selected, the printer paper is highlighted in pale grey and a square Move edit handle displays at its center.

3. Click and drag the Move edit handle to position the printer paper so that the portion of your drawing that you would like to print on your first page is located within the printable area of the page.

4. Select **File> Print> Print** . In the **Print** dialog, make sure **To Scale** is selected, then click OK. See "Print Dialog" on page 86.

5. Select the printer paper rectangle and move it so that the desired contents of your second printed page are within the printable area and print **To Scale**.

6. Continue moving the printer paper and printing as needed.

When printing multiple pages, it is generally a good idea to leave some overlap on the edges of each page to make sure that information near those edges is not left off the printed pages by mistake.

Printing to a PDF File

Portable Document Format, or **.pdf** files, are one of the most universally compatible and

efficient file formats and can be viewed and printed on most computer platforms.

Creating a **.pdf** document requires that a **.pdf** printer driver be installed on your computer. This is not a physical print device, but a software program that is recognized as a printer by all other programs and creates a **.pdf** file that can be read and printed using Adobe® Reader®.

A selection of .pdf printers and Adobe Reader .pdf reader are available for download. Select Help> Download PDF Printer Driver or Help> Download PDF Reader.

When you print to a **.pdf** print driver, you will be asked for a file name and destination automatically.

To print to .pdf

1. Select **File> Print> Print** to open the **Print** dialog and select your **.pdf** printer driver as you would select any other printer.

2. Select the needed options in the **Print** dialog, then click **OK**.

3. In the **Save As** dialog, select a **File name** and **Save in** location for your **.pdf** file.
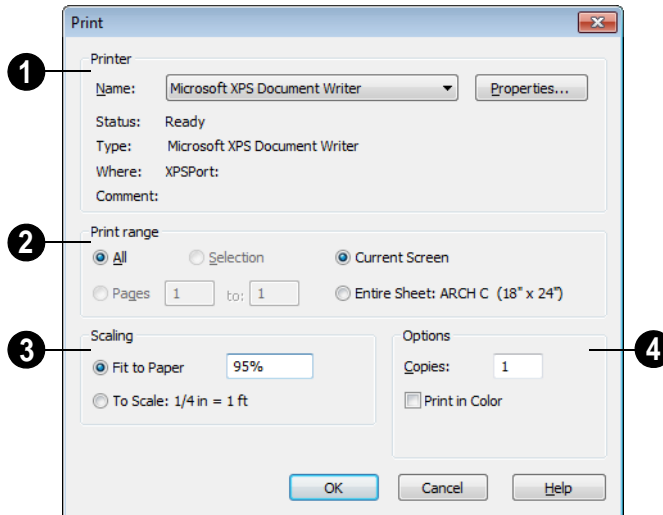
Print Dialog

To print directly from floor plan view, 3D Vector Views and the Materials

List, select **File> Print> Print**. The **Print** dialog opens.

Note: 3D views that are not Vector Views can be printed using Print Image. See "Print Image Dialog" on page 88.

1 Specify **Printer** parameters.

- Choose a printer from the **Name** drop-down list.
- Click **Properties** to verify that the printer's paper size, orientation and other settings are configured correctly.

2 Specify the **Print Range**.

- **Current Screen** prints only the portion of the entire View showing on screen.
- **Entire Sheet** prints the entire sheet even though you may be zoomed in on a portion of the view.

Note: If you are zoomed out, and Current Screen is selected, any white space around the plan is calculated for printing.

3 Select from the available **Scaling** options.

- **Fit to Paper** prints the plan on one page. The program will use whatever scale is necessary to fit the plan on one page. If a percentage less than 100 is specified, only that portion of the printable area is used.
- Select **To Scale** to print at the scale specified by settings in the current plan.

**4** Select from the available **Options**.

- Specify the number of **Copies** to print.
- Check the **Print in Color** box to print in color or clear the check box to print in grey scale. This option is available from layout files as well.

Most black and white printers will print a grey scale approximation of the colors if **Print in Color** is selected.

Print Image Dialog

Any view can be printed by selecting **File> Print Image**. This is the only way to print most 3D views. See "Rendering" on page 59.

The **Print Image** dialog is similar to the **Print** dialog; however, the printing process is different. **Print Image** prints individual pixels as opposed to vectors (lines).
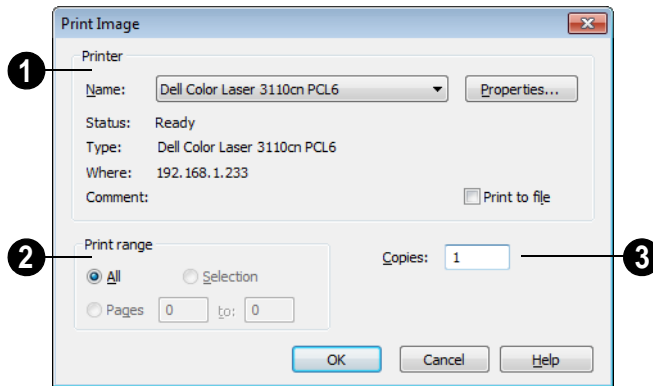
1 Specify the **Printer** parameters.

- Choose a printer from the **Name** drop-down list.
- Click **Properties** to verify that the printer's paper size, orientation and other settings are configured correctly.

2 Specify the **Print Range**.

3 Specify the number of **Copies**.

Index

Numerics

A

B

C

Chief Architect Viewer X5 Reference Manual

Layout Page.. 80

D

Delete
3D Surface.. 49
Details
Cross section/elevations...................... 47
Dimensions
Tape Measure.................................... 14
Display
3D Views 48
Options, Layout................................. 80
Dynamic
Print Preview..................................... 84

E

Edit
Handles 10
Toolbar... 11
Edit Handles 10
Elevations
Create 46
Interior... 44
Enhanced Metafiles........................... 76
Exit Program 26
Export
EMF 76
Picture Files...................................... 75
Windows Metafiles 76
Windows Metafiles Dialog................... 76
WMF.. 76

F

F6 Key
Fill Window 37
Field of View...................................... 55
File
Backing Up Your Files 20

Management 17
Fill
Window.. 37
Window Building Only 37
Final View 60
with Shadows 60
Find Plan Wizard................................ 23
Floor
3D Overview....................................... 44
Camera... 44
Overview..................................... 44, 46
Floor Plan
View 14
Floors
Change Floor/Reference 28
Current Floor..................................... 28
Floor Up/ Floor Down......................... 28
Reference Floor................................. 28
Swap Floor/Reference 29
Framing
3D Overview....................................... 46
Full
Overview..................................... 44, 46

G

Getting Help....................................... 15
Glass House
Options Dialog................................... 61

H

Help
Display.. 11
Tool Tips... 15
Hotkeys 11

I

Icons
Arrange... 42

90

V

W

Z