Getting Started

Welcome to LandDesigner 3D, a fun, fast way to design a landscape or garden.   You can plan a new landscape from the ground up, redesign an existing yard, or simply add new plants.   LandDesigner 3D provides hundreds of trees, shrubs, flowers, and hardscape features for your designs.

When you start Sierra LandDesigner 3D, the **opening window** is shown. The Welcome screen gives you four choices to begin:

Start a New Design.   Select this option to begin a design from scratch.

Open the Designer Gardens Library.   Choose from a list of gardens and landscapes designed by experts.   This is a great starting point for ideas and inspiration.

Open a Saved Design.   Return to a design you worked on in the past.

Open Most Recent…   Return to your last garden design.   This is not visible if you are running LandDesigner 3D for the first time.

What do you want to do?

Take the Tutorial

View sample designs

Navigate the Designer

Take the Tutorial

If you are a new user (and if you have a sound card), we recommend that you watch the tutorials that are available as you create your own designs.

If you are just starting and you are at the LandDesigner 3D opening window, click the **Start New Design** button.   When the Welcome window opens, click the **Getting Started** button.   This plays a tutorial that is an overview of LandDesigner 3D.

Once you are past the opening window and beyond the Interview stage, you can also access   tutorials from the Guide tab by clicking the **Tutorial** button. A tutorial related to the task you are working on will play.   Additional tutorials can help you at each step of the design process.

Note: You can stop any tutorial by pressing the **Esc** key.

LandDesigner 3D also includes a series of tips that appear in the Guide tab.   These tips demonstrate how to use many of the features of LandDesigner 3D.

Viewing sample Landscape and Garden designs in the Designer Gardens Library

The sample designs are examples of what you can do with LandDesigner 3D. We recommend that you view some sample designs in the Designer Gardens Library before creating your own.

Landscape designs are examples of complete landscapes that typically include a house, trees, shrubs, driveways and other objects. These designs demonstrate how to use LandDesigner 3D to create a complete design for the whole landscape.

Garden designs are examples of garden beds that have been created to suit a particular environment. These designs include a careful selection and arrangement of plants that combine aesthetic and practical qualities. For instance, the Northwest Garden has plants that grow well in shade and rich soil.

If you have saved designs of your own as sample files, they appear under the category My Samples.

You can also use a sample design as a starting point for a landscape garden or design of your own.

To look at a sample design in LandDesigner 3D:

1. **Select Open Designer Gardens from the File menu.**

   The Designer Gardens Library window appears.

2. **Click the plus (+) symbol to display examples for each garden category.**

   If you have created samples, the My Samples tabs also appears.

3. **Click to select a listing that interests you.**

   When you select a listing, a small image is shown on the right, and a description on the left.   You can move through the selections using the up and down arrow keys or the mouse.

4. **When you have selected the one you want, click OK.**

   After a short pause, the sample appears in the Designer.

Working in the Designer

The Designer is the main window in LandDesigner 3D, where you create and visualize your designs in two and three dimensions.   Use the Designer to try out changes and improvements in your yard, add new plants, and adjust grading, among other things.

Click on an area in the screen to see what each tool does.
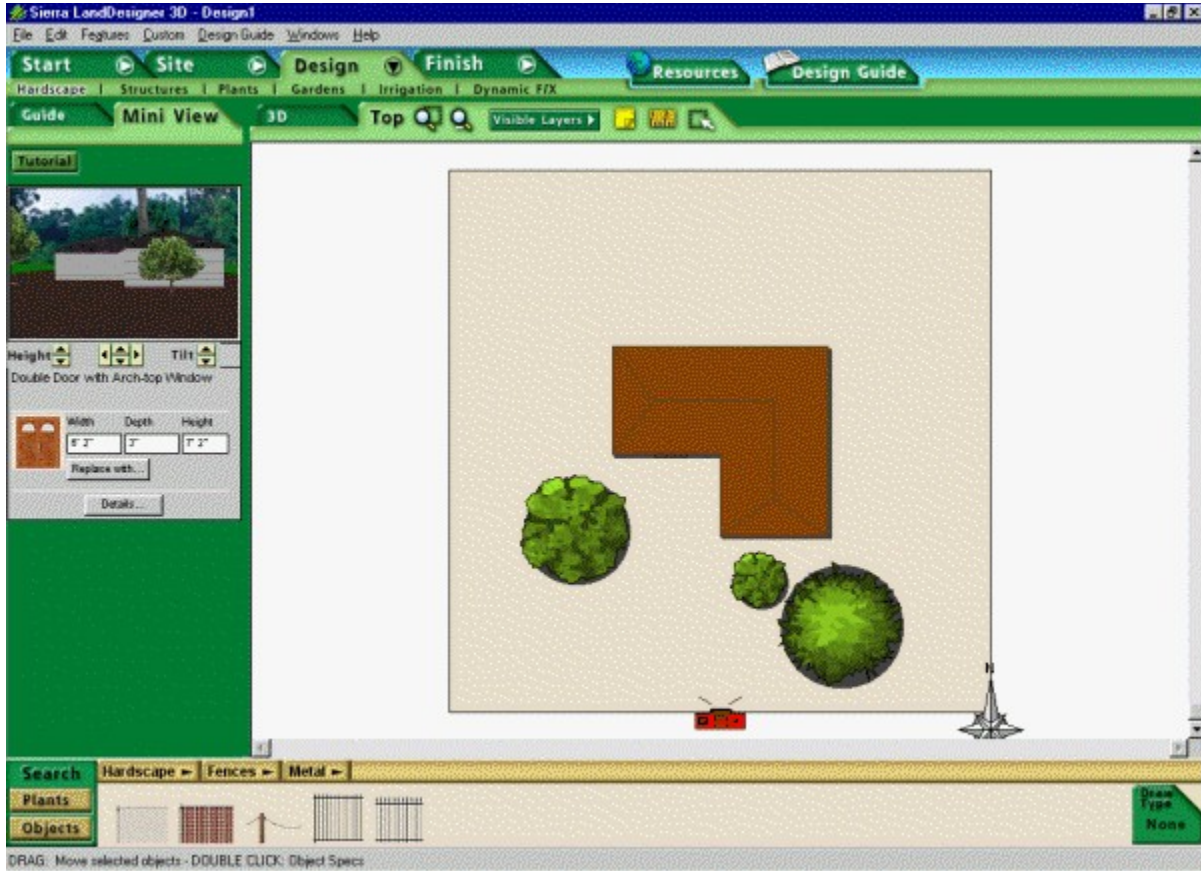
See also:

Using the Object toolbar in Top View

Moving around in the 3D View

Moving the camera

Using layers

Use the Object toolbar in Top View

If you click the **Top** in the Top View toolbar, the Object toolbar at the bottom of the screen displays options for working within Top view.


In Top view, the Object toolbar tools let you add plants and other objects to your design. See **Add plants** and **Add objects** for details on using these tools.
When you select the 3D view, the Object toolbar displays options for moving around in 3D. See **Move around in 3D View** for more information.

Navigate in 3D View

Use the 3D view to see a realistic rendering of your landscape design in three dimensions. There are two ways to move the vantage point.   You can use the Navigation tools, or you can click and drag the mouse in the 3D view.
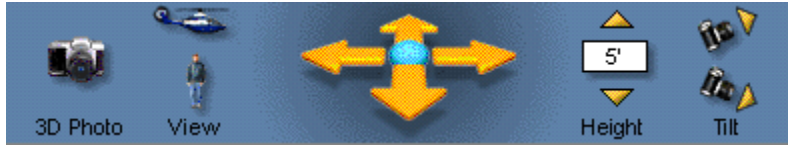
The 3D view toolbar is divided into four sets of tools for navigating the 3D view.   You can use this toolbar to move the vantage point.

View. Click the two View icons to switch between an overhead view (helicopter icon) or an eye-level view (person icon).

Move. Click a navigation arrow to move in the direction indicated by the arrow. Hold down the mouse button to continue the movement.

Height. To adjust your viewing height, click the Up and Down arrows.

Tilt. Click the Tilt icons to adjust your viewing angle.

You can change the 3D view in the following ways by clicking and dragging the mouse within the view. *For best results, start dragging from the center of the 3D view or arrow pad.* This mode of movement takes a little getting used to, but when you have mastered it, you will feel like you can fly around your design!

To move sideways in the 3D view, hold down the Shift key as you drag the mouse.

To change your viewing height in the 3D view, hold down the Ctrl key as you drag.

Note: The closer the mouse is to the center of the 3D view or arrow pad, the slower your movement. Dragging the mouse away from the center increases your speed.

Using the keyboard: Press the four arrow keys on the keyboard to move in small, precise increments in any of the four directions. To use these arrow keys, 3D view must be the active window.

Move the camera

Moving the red camera in Top view is often the best way to see what you want in the 3D view. While the **Navigation tools** let you change your view gradually and incrementally, you can move your view to any part of the design by repositioning the camera.

To move the camera:

1. **Click the Camera icon in Top view.**

    When you position the cursor over the icon, the word "Move" appears.

2. **Hold down the mouse button and drag the camera to the location you want to see in 3D view.**

    If necessary, use the **Zoom tools** to see the camera better.

3. **To rotate the camera, move the mouse over the spin handle near the camera icon, then click and drag the mouse to rotate the camera.**

4. **Go to 3D view by clicking the 3D tab in the Top View toolbar.**

    The new camera position displays the new perspective in the 3D view.

Use layers

The Visible Layers control in Top view lets you show or hide various aspects of your landscape design. You might want to turn off the display of some items if your computer is running slowly or your design becomes congested.

To use the Visible Layers option:

1. **If necessary, move to Top view by clicking the Top tab in the Top View toolbar.**

2. **Click the Visible Layers button in the Top View toolbar.**

    The list shown in step 3 appears. If a layer appears with a check mark, it appears in your design. Each item in the list is a *toggle*, meaning that you turn it on or off each time you click it.

3. **Turn the display of the following items on or off.**

    Foliage. When selected, plants are shown with full foliage. If you turn this option off, plants appear as circles. Turn the **Foliage** display off if your computer is running slowly or if your design appears cluttered. Turning off the foliage layer has the greatest effect on speed of processing.

    Slope Detail. When selected, the ground displays any mounds or holes you applied. If you turn this option off, the mounds and holes disappear.

    Utilities. When selected, the locations of all utilities such as water lines are shown in Top view. If you turn this option off, the utility symbols disappear.   This option also affects property lines.

    Sprinkler Coverage. When selected, sprinklers appear with their coverage areas. If you turn this option off in Top view, the sprinklers appear without coverage areas. Sprinkler coverage areas can appear as rectangles, circles or pie shapes.

    Plant Labels. By default, LandDesigner 3D assigns labels to most plants placed in your design. When the **Plant Labels** option is selected, these labels appear with their items in Top view. If you turn this option off, the labels disappear. The **Plant Labels** option is off by default. You can change the font, type size, and background for your labels, and you can display full plant names, plant types, or personal notes. To learn how to select and customize labels, click Change label appearance.

    Your Notes. When selected, you can see any notes you added using the Add Text tool, which is located on the Top View Toolbar. If you turn this option off, your notes are no longer displayed.

 See also:

Change label appearance

Change label appearance

You can change the appearance of the labels in your design. The Plant Labels option lets you show the full name, plant type (shrub or annual, for example), or notes for each of your plants. In addition, you can select the font, type size, and effects for your plant labels and notes.

To change label appearance:

1. **From the Edit menu, click Options, and then click the View tab. Click Plant Labels. Or, right-click on your design (but not on an object in the design) while in Top View, and then click Plant Labels.**

2. **Select a label type to display and customize.**

3. **Select a font, style, and type size for the label.**

4. **Select a color for the label background.**

5. **To create a border around the outer edge of the label, select Draw Border.**

6. **Click OK to save the new settings.**

7. **In the Top tab, click the Visible Layers button and check Plant Labels.**

See also:

Improve performance

Save your design

When you reach a stopping point in your design, you can save it for later use. It's a good idea to save your design regularly once you know you want to keep it.

To save your design in LandDesigner 3D:

1. **Select Save As from the File menu.**

   You see the Save dialog box.

2. **Enter a name for your design in the File Name field.**

3. **If necessary, assign the design file to another directory on your drive.**

   By default, your design files are saved to the C:\Sierra\Land3D\Design directory. LandDesigner 3D gives the file a *.3dl* extension.

   Use the navigational controls in the Save As window to change directories. See your Windows manuals if you need more information.

4. **Click Save to save the design file.**

Note*:* If you try to exit LandDesigner 3D without saving your work, you are prompted to save the design first.

To save your design as a sample in LandDesigner 3D:

1. **Select Save as Sample File from the File menu.**

2. **In the next window, type a name for the sample and click OK.**

   The design you created is now available at any time when you select **Open Designer Gardens** from the **File** menu and select the **My Samples tab**.

Share your design

Three commands in the File menu let you share your design with others by exporting it as a bitmap or sending it via e-mail.   You can also share your design with another LandDesigner 3D user over the Internet.

What do you want to do?

Export your design

E-mail your design

Use Internet Walkthrough and Design Sharing

Note: You can use the Recorder feature to show snapshots and animated Walkthrough tours of your design to other people. For more details, see **Record Walkthroughs and Snapshots**.

Print your design

LandDesigner 3D gives you several options for printing your landscape design.

If you select the **Finish** phase in the Step-by-step toolbar and then click **Print Plans**, the Designer gives you options for printing the Top view, the 3D view, or a list of plants and materials used in your landscape design. Click the option you want, then click **OK** in the resulting window to print the view or list.

If you don't want to use the Step-by-step toolbar, you can print your design at any time by following the steps below.

To print your design in 2D:

1. **Select the Top View tab.**

2. **Select Print from the File menu.**

4. **Enter a title if desired, and then select the desired scale for your printout.**

5. **Optionally, select Scale and Ruler to print them on your design.**

6. **Select Hide Area Fills to print area outlines only, and then click OK.**

7. **Specify a paper orientation (landscape or portrait), and the type of paper to use. Click the Properties or Options button to select advanced print settings, and then Click OK.**

To print your design in 3D:

1. **Select the 3D view tab, and then select the view to print.**

2. **Select Print from the File menu.**

3. **Specify a paper orientation (landscape or portrait), and the type of paper to use. Click the Properties or Options button to select advanced printing settings, and then click OK.**

Export a design

If want to incorporate a screen capture of your 3D view into another document, use the Export Bitmap command in the File menu. LandDesigner 3D saves the 3D view as a two-dimensional Windows bitmap.   If you want a higher quality image, see **High-Resolution Raytracing**.

To export your design as a bitmap:

1. **From the Design tab, click the 3D tab in the Top View toolbar to go to 3D view.**

   (You cannot export the Top view as a bitmap image.)

2. **Select Export Bitmap from the File menu.**

3. **In the Save window that appears, enter a name for the file in the File Name field. (Optionally, select a file type, such as 8-bit or 16-bit.)**

4. **If necessary, assign the file to another directory.**

   Use the navigational controls in the Save window to change directories on your drive. See your Windows manuals if you need more information.

5. **Click Save to save the file.**

E-mail your design

If you have a modem and a MAPI-compliant e-mail such as Microsoft Exchange or Outlook, LandDesigner 3D also allows you to e-mail your designs to others. For others to view your design they must also have LandDesigner 3D.

If you do not have an e-mail program or an Internet connection, do not use this command.

To e-mail your design:

1. **Open the design file in LandDesigner 3D.**

    Choose **Open** from the **File** menu and locate the file. Your design appears in the Designer.

2. **Select Mail This Design from the File menu.**

3. **Click OK in the resulting windows until the e-mail window appears.**

4. **Send an e-mail message as you normally do.**

    Your design is sent with the e-mail as an attachment.

Create your design

This section explains the Step-by-step toolbar in LandDesigner 3D, which guides you through the steps of building your design.

What do you want to do?

[Use the Step-by-step toolbar](#)

[Get help as you work](#)

[Start your design](#)

[Define the site](#)

[Lay out the design](#)

[Finish the process](#)

Use the Step-by-step toolbar

To help you proceed logically through the design process, LandDesigner 3D has a *Step-by-step toolbar*.

This toolbar contains four main phases: Start, Site, Design, and Finish. When you click a phase, the toolbar changes to display actions within that phase. For example, click Site, and buttons appear below the tab that let you select to work with your lot, house, slope, symbols, and roads/driveway.
We want to emphasize that the Step-by-step toolbar is a guide to using LandDesigner 3D. It is not mandatory that you use its steps in order, or use it at all.

As you click through the steps in each phase, you may find activities that don't interest you. If so, you can skip them. To skip ahead within a selected phase, simply click on the next topic listed for that phase under the tab. To move ahead in the step-by-step method, click the Next button to move on to the next step.

The toolbar consists of the following design phases:
Start. This phase welcomes you to LandDesigner 3D with an overview tutorial.   To view this, select the Welcome button under the Start tab, then click the Getting Started button.   When you are ready to move on, click the Interview button under the Start tab to go through interviews to help LandDesigner 3D customize plants and materials to your locale.   See **Start your design**.

Site. This phase is where you lay out your landscape site, including the lot, house, slope, and roads and driveways.   See **Define the site**.

Design. This phase helps you add and position plants, structures, and other objects in your design. See **Lay out the design**.

Finish. This phase is where you can see a **Design Review,** print your design and view the list of materials.   See **Finish the process**.

Experienced users can skip the Start phase and go straight to the Site phase in the Step-by-step toolbar. You can change menus in the Object toolbar at any time to drag plants and objects of interest into your design.

Finally, you also have quick access to two useful sources of information: the **Resources** option, and the **Design Guide**.

Resources

The **Resources** option is located on the Features menu.   Click this option to open a window listing useful resources for gardeners.   The resources include recommended books, magazines, organizations and web sites.

Web sites include:
SierraHome's **gardening.com** web site, where you can get expert answers to your gardening questions and access a wealth of online resources
The Ortho Online web site, where you can find answers to your gardening problems.

Get help as you work

Guide tab

If you need help with any of the steps in the Step-by-step toolbar, click the **Guide** tab at the left side of the window for more information. For a narrated explanation, click the **Tutorial** button in the Guide tab.

Design Guide

For quick landscaping tips and design information, use the **Design Guide**.   To open the **Design Guide**, use the **Design Guide** menu or click the **Design Guide** button.   You can view any of the topics by selecting one of the chapters and double-clicking.

Note: The sidebar text on the left side of the screen often contains links to the Design Guide. Click a link to start the Guide and display the selected topic.

Step-by-step toolbar tips

For the most part, steps within the Step-by-step toolbar take one of two forms.

Wizards: When you click a step marked with the wizard symbol, LandDesigner 3D uses a "wizard" format to help you through the step. A wizard is a series of windows that guide you through a process and ensure that you make the necessary selections to perform the task. To move to the next window of a wizard, click **Next**. To move to the previous window of a wizard, click **Back**.

Object toolbar: In some steps you add plants and objects from the Object toolbar. In these cases, the Object toolbar changes to display appropriate items for the selected step. For example, the Plants menu appears when you click **Plants** within the **Design** phase. You can then drag these plants into your design. You can also change the Category buttons yourself (in non-wizard steps) to display other items.

For details on adding plants to your design, see **Add plants**. For details on adding other objects, see **Add objects**.

Start your design

LandDesigner 3D includes a Design Guide that has many helpful hints about how to start projects. To open the Design Guide, click the **Design Guide** button to the right of the Step-by-step toolbar. Or, select Design Guide from the menu bar, and then click a Design Guide option.

Note: The sidebar text on the left side of the screen often contains links to the Design Guide. Click a link to start the Guide and display the selected topic.

Once you are ready to begin your design, select the **Start** phase in the Step-by-step toolbar. There are two sections in the Start phase:

Welcome. The Welcome screen presents an overview video to help you use LandDesigner 3D.

Interview. When you click **Interview**, LandDesigner 3D presents several questions about your gardening conditions and objectives. Your answers help LandDesigner 3D customize the program according to your needs. For example, your answers will customize the plant options that appear in the Object toolbar. Your answers also determine the default zone and soil settings for searches in the Plant Search window.

Question 1 in the interview lets you specify your garden zone. USDA hardiness zones subdivide the U.S. according to minimum temperatures at which plants can survive. If you don't know your zone number, click **Map** and then click your zone in the map.   See **USDA Hardiness Zone Map** for instructions.

When you finish the first set of questions, click **Next** to see the second set. Once you have answered all questions in this design phase, click **Done** to move to the next phase.

USDA Hardiness Zone Map

The Zone map displays USDA hardiness zones, which subdivide the U.S. according to minimum temperatures at which plants can survive.   You can either set your zone in either of two ways:

Click on any region in the continental United States

Enter your zip code and press the Set Zone from Zipcode button.

Define the site

To define the site in your landscape design, select the **Site** phase in the Step-by-step toolbar. The Site phase consists of five options:

Lot. Click this button to open the Lot Wizard, in which you define the dimensions, property lines, and compass setting of your lot.

House. Click this button to open the House Wizard, which takes you through the steps of representing your house in the design.

Slope. This wizard helps you define the slope of your lot and add mounds and holes.

Symbols. Insert symbols that indicate problem areas and points of interest on your lot, such as wind direction, noise problems, and eyesores.

Roads/Driveway. Define roads and driveways on your lot.

Define the lot

When you click the **Lot** button in the **Site** phase, the Lot Wizard takes you through the following three steps to define your lot. Click **Next** to move through the wizard.

Setting the lot's dimensions. Define the width and depth of the scene in the appropriate fields. To specify a background and ground cover for the design, click the **Change 3D Ground** or **Change 3D Backdrop** button. For more details, see **Change backgrounds and ground covers**.

Laying down the property lines. Drag a property line tool from the Object toolbar into the design and define a custom shape that represents your property lines.

Setting the compass. Rotate the compass to point north and properly situate your design. To rotate the compass, click on it in the Designer. The dot that appears with the compass is the **spin handle**. Hold the mouse pointer over the dot, then click and drag the mouse to rotate the compass.

Define your house

The House Wizard helps you quickly build a facsimile of your home in the landscape design. To begin, click the **House** button in the **Site** phase to see Step 1 of the House Wizard.

The House Wizard has seven steps. After each step, click **Next** to move through the wizard.

To create a representation of your house in the design:

1. **Select a template to define the basic shape of your house.**

   You can click one of the three displayed templates, create a custom shape, or click the **Use a Finished Sample Home** button and select a finished home from the resulting list. If you select a custom shape or a finished home, skip to step 4.

   In choosing a template, choose the closest footprint for the main portion of your home.   You'll be able to add extra rooms later.

2. **Determine the size and orientation of the house.**

   Each side of the house is identified with a letter. To change the length of a side, type a new length in the field of the corresponding letter. To implement this change, click on one of the other length text boxes. To rotate the house shape or flip it horizontally or vertically, click the **Rotate** or **Flip** buttons.
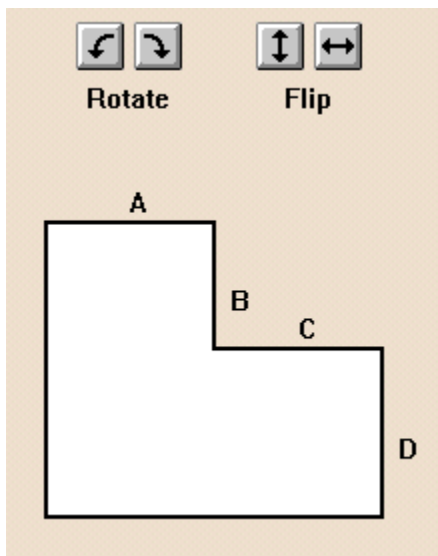
3. **Define the following roofing and siding options:**

   a) Select Gable, Hip, or Flat as the roof type.

   b) Drag the roof slope slider bar to determine the slope of the roof.

   c) Click **Yes** if you want the roof to have an overhang.

   d) Set the number of stories for your house.

   e) Click a **Material** button to determine the texture of the exterior walls, roof, and trim. The Choose Materials window opens. If you need help using this window, see **Add colors and textures**.

4. **Add more blocks, if necessary, to complete the basic structure of your house.**

   For example, you can add a garage to the house. Drag these blocks from the Object toolbar into the design. Then resize the blocks by dragging the arrows around them. To rotate a block, click it to select it, then click and drag the **spin handle** that appears above it.

   The Spec Sheet can help you revise your home design. To open the Spec Sheet, **double-click** a

house block in Top view.

To change the height of the walls in a block, change the setting in the **Wall Height** field of the Spec Sheet.

To raise a block, change the setting in the **Height Above Ground** field of the Spec Sheet.

The wall and roof settings in the Spec Sheet correspond to your selections in the previous step of the House Wizard. You can change these settings if necessary.

For more details on using the Spec Sheet, see **Using Spec Sheets**.

Once you finish adding blocks, preview your home design in 3D by clicking the **Mini View** tab. If necessary, revise the house until you are satisfied with the basic shape.

5. **Add windows and doors to the house.**

First, click the **Mini View** tab to display a tracking tool that helps you navigate around the house and find the spots where you want to add windows and doors. This tool is only visible when you have the 3D tab selected.

Click and drag the camera around the circle in the viewer to rotate your view. Your vantage point of the house changes in 3D view. To change the viewing height of the 3D scene, you can use the 3D Height at the top of the 3D screen.
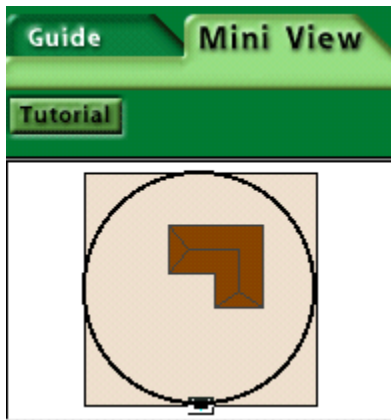
Drag doors and windows from the Object toolbar onto a wall of the house. Click the menu in the Object toolbar to change your selection from doors to windows.

> **Note**: This is the only place in LandDesigner 3D where you can directly place or move windows and doors into 3D view. You might have to wait occasionally while the 3D scene redraws.

In the Designer, you can drag the windows and doors to new locations on the house. To resize doors and windows, double-click them in the design. Then change the Width, Depth, and Height settings of the Spec Sheet that appears. You can also use the Mini View Spec Sheet in the Mini View tab. For details on using the miniature Spec Sheet, see **Use the Mini View Spec Sheets**.

To delete a door, window, or entire block from the house design, select the item and press the **Delete** key on your keyboard. To duplicate selected items, use the **Copy** and **Paste** commands in the **Edit** menu.

6. **Add exterior details such as stairs and a chimney.**

Drag these details from the Object toolbar onto the house. Click the menu in the Object toolbar to change your selection of exterior details. You can resize these details in the Designer by selecting them and then dragging the arrows around them. To rotate a detail, click it to select it, then click and drag the **spin handle** that appears above it.

To delete exterior details from the house design, select the item and press the Delete key on your keyboard. To copy selected items, use the **Copy** and **Paste** commands in the **Edit** menu.   Then move the duplicate into position.

You can also use the Spec Sheet to alter these exterior details, as described in the previous steps. For example, use the Height Above Ground setting to change the elevation of dormers and chimneys.

7. **Finish the house by positioning it on the lot.**

    To reposition the house, click and drag it in the Top view of the Designer.

    To revise the house, you can click **Back** to return to previous steps in the House Wizard. Click **Done** when you are finished. You can also revise the house at any time by double-clicking it in the Top view of the Designer and changing the settings in the House Wizard.

Note: To edit the house after you leave the House Wizard, **double-click** the house. Click **OK** when you see a message explaining you will return to the House Wizard. (The rest of your landscape becomes invisible). Edit your house blocks in Step 4, edit your windows and doors in Step 5, and edit any extra details in Step 6. When you complete the House Wizard, your landscaping reappears.

Define the slope of your lot

The slope wizard enables you to simulate slopes and grades on your lot.   Slopes and grades are a very important characteristic of your design and can greatly influence the appearance of your design. This can be especially true if you are concerned about preserving a view or ensuring adequate sunlight on your garden.

To define the slope of your lot:

1. **Click the Slope button in the Site phase to see Step 1 of the Slope Wizard, then define the basic slope of the lot.**

   The perspective is from a point South of the lot, looking North.   Thus, if your lot slopes to the South, you would raise the topside of the green and lower the bottom side.

   § Set the maximum ground height of the grade at the top of the slope.

   § If your lot has one predominant slope, click the up and down arrows on the appropriate side(s) of the lot to mimic the slope.

   § Use the text boxes to specify the height of any side of the slope.

   § To return the site to its original state, click the **Reset Tilt** button.

2. **If your lot is terraced or has a number of rolling slopes, you can click the Advanced button.**

   Advanced slopes are optional. If your lot is sloped but the land is otherwise flat, like a table tilted at an angle, then you can skip this step. Use Advanced slopes to define a curvature or terraced effect across one plane of your lot.   These curvatures or terraces add to the general slope defined in the first step.

Defining a slope

Defining a terrace

Each time you click on the shape, LandDesigner 3D adds a point. You can drag these points to change the elevation and define the slope. To delete a point, click and drag it over another point. Use the measurement guides that appear when dragging points to help you judge the position of the curve. To return the shape to its original form, click **Reset Profile**.

   In addition to defining the profile of the slope, you also need to define which direction it runs through the lot.   To choose which direction the curve runs through your lot, click either the left or bottom option buttons that appear just to the left of and below the green slope in the window.

   If you click the bottom option button, the profile you have defined will run West to East – as if you are looking at it from the South.   If you click the left option button, the profile will run from North to South as if you are looking at it from the West.

3. **Add hills and valleys: click Next to go to the final step of the Slope Wizard.**

   Here you can add holes and mounds to your design from the Object toolbar.
   The Object toolbar will show a selection of mounds and holes when it opens. To add a mound or hole, select the shape from the Object toolbar that closely matches what you need to add to your design.   Drag it on to Top view.

   Once the mound or hole is added to the Designer, you can move or reshape it by dragging the

triangle and diamond markers.   You can also rotate the hole using the dot marker.   If you want to reshape the hole or mound using measured dimensions, double-click on it to open the Spec Sheet. Here you can add numbers for the width, depth, and height.

If none of the choices on the Object toolbar match your needs, you can draw your own hole or mound shape using the Draw Type tools.   For more information on these tools, see [Draw your own object shapes](#).

Note: By default, mounds and holes do not appear in 2D view after you have left the slope wizard. To make them visible again in Top view, click the Visible Layers button on the Top View Toolbar. From the menu that appears, select Slope Detail.   Slopes and mounds are then visible as dotted lines again.

Use symbols to mark points of interest

Click the **Symbols** button in the **Site** phase to insert markers that indicate potential problem areas and points of interest on your site, such as wind direction, noise problems, and eyesores you want to hide. Drag these symbols from the Object toolbar and drop them in the proper place on your site.

Note: Symbols do not appear in 3D view.

The Design Guide provides information to help you deal with potential problem areas. If you choose Chapters from the Design Guide menu and then choose Chapter 2, the resulting window contains topics on screening for privacy, buffering noise, and buffering wind. Click a topic to read more about it.

Define roads and driveways

Click the **Roads/Driveway** button in the **Site** phase to define drives, patios, and other paved surfaces in your design. Drag items from the Object toolbar and drop them in the design. Paved surfaces are represented in your design as textures on the ground.

In the design, you can resize and reshape these surfaces as needed. See **Define closed shapes** for more information.

Lay out the design

After you finish defining the site and house, you're ready for the most crucial part of your design: adding a variety of plants and other exterior objects such as decks and arbors.

Much of your work during this step consists of selecting plants and other objects in the Object toolbar, then positioning and reshaping the plants and objects in the Designer.

If you need advice using any of the options in the Design phase, click the **Guide** tab at the left side of the window.

The Design phase contains six steps:

Hardscape. Hardscape refers to built components of your yard and landscape, such as fences and walkway paths. If you cannot find a particular object, you can create your own.   See **Drawing your own object shapes** for details on adding custom objects to your design.

Structures. See **Add objects** for details on adding structures such as lawn chairs, arbors, sprinklers and other objects to your design.

Plants. For details on adding plants to your design, see **Add plants**.

Gardens. For details on adding garden beds to your design, see **Add garden beds and hedges**.

Irrigation. Use this wizard to plan an irrigation system for your design. You can lay out in-ground sprinklers or surface drip tubing by dragging their components into the design from the Object toolbar. See **Irrigation basics** for instructions.

Dynamic F/X (Effects). Once you've defined the plants, structures, and other objects in your design, you can use the Shadow Caster to see how shadows fall across your design in Top view. You can also project the plants' Growth Over Time and use the Seasonal Change feature to see how the plants will look from season to season. For details on using these dynamic effects, see **Use the Shadow Caster**, **Project Growth Over Time** and **Project Seasonal Change**.

Note: You can define custom shapes for many of the components you add to your design from the Object toolbar. For details on defining custom shapes for plants, see **Define ground cover with the drawing tool**.   For objects, see **Draw your own object shapes**.

Finish the process

When you complete your landscape design, select the **Finish** phase in the Step-by-step toolbar. You have three options in this phase:

Print Plans. When you click **Print Plans**, the Designer gives you options for printing the Top view, the 3D view, or a list of plants and materials used in your landscape design. Click the option you want, then click **OK** in the resulting window to print the view or list. For more details on printing, see **Print the design**.

Shopping List. Click this button to see a list of plants and materials used in your landscape design. For more details, see **Use the Shopping List**.

Add plants

This section explains your options for adding and manipulating plants in the Designer. For information on adding other objects in LandDesigner 3D, see **Add objects**.

You'll find two major categories of plants in this software, generic placeholders and specific varieties. For example, the product includes generic plants such as Generic Round Tree, as well as specific plants such as the Sugar Maple. For more information on selecting types of plants, see *Selecting Plants*, in Chapter 5 of the Design Guide.

To add major plantings to your landscape quickly, use the generic shapes to get the massing you want, then refine these with specific plants. Each generic plant can be replaced with a specific one once it is in your design. **Double-click** the plant in Top view to open its Spec Sheet, then click the **Replace with...** button in the window that appears. See **Using a plant's Spec Sheet** for more details.

You can also add a specific plant directly to your landscape instead of replacing a generic placeholder. See **Using the Plant Search window** for more information. In the Plant Search window, you can search by plant name or by attributes. Add the plants you choose to Your Object Bar, then drag them in to the Top view.

What do you want to do?

Add plants from the Object toolbar

Add plants using the Plant Search window

Position plants

Revise a plant using its Spec Sheet

Add your own plant records

Add garden beds and hedges

Define ground cover with the drawing tool

Add objects from the Object toolbar

The Object toolbar lets you quickly add plants and other objects to your design. Choose generic placeholder plants by type and shape to get the overall plantings you want in your design, then refine these later with specific plant varieties.

Note: If you already know a specific plant variety you want to add to your design, use the Plant Search window to locate the plant and add it to Your Object Bar. See **Add plants using the Plant Search window** *for instructions.*

To add objects and plants using the Object toolbar:

1. **If you are not already in the Top view, click on the Top tab to go there.**

   You must be in Top view to add plants in the Designer.   Also, the options available in the Object toolbar Category button menus depend on the button selected under the Design tab on the Step-by-step toolbar.   For instance, to add plants, you must select on the Step-by-step toolbar either the Hardscape, Structures, or Plants button.

2. **In the Object toolbar, click the first Category button and select the type of object you want to add.**

   For example, you can click the first button and select Accents from the menu.   The related accent items appear in the Object toolbar to the right of the buttons.

   To view different lists of objects in the same category, click the next Category button. A menu will open from which you can make a new selection.

   To switch to a different category, click the first button again and make a different selection, such as Furniture or Structures.   Some types of objects, such as annual plants, offer a wide variety of generic shapes, based not only on the overall shape of the plant, but on features such as blossom shape.   Other types of plants, such as trees, provide lists of specific plants well suited for different regions.

   Note: Not all Category buttons have following buttons. Also, the Categories are hierarchical, meaning that your choice in the first button menu determines the options that appear in the following buttons.   Your choice of button menus is also affected by where you are in the design process.   You may need to move to a different section to find what you want.

3. **When you find the plant you want for your design, click its icon in the Object toolbar and drag it into Top view.**

   You can also place the plant in Top view by clicking once on the plant and then clicking once inside Top view where you want the plant.

   Note: A brief description of the plant usually appears when you hold your cursor over it in the toolbar.

4. **When the plant is in Top view, position it properly.**

   For details, see **Positioning plants**.

You can replace generic plants with specific plants once you have placed them in your design. For details, see **Revising a plant using its Spec Sheet**.

Note: To quickly distinguish between generic plants and specific plants, look at their icons in the Object toolbar. Specific plants have an inset photo on their icon.

Position plants

Use the Top view in the Designer to reposition and resize plants. You use the 3D view to see the effects of your work. Any changes you make in Top view apply immediately in 3D view.

What do you want to do?

Move plants

Change a plant's size

Copy plants

Delete a plant

Move plants

Elevation of dropped objects

LandDesigner 3D automatically places most plants on the ground. In some cases, however, you might want to change the plant's elevation. For example, you might want to place a plant in a pot or on a deck. For details, see **Position decorations and smaller objects**.

Moving plants with the mouse

To move a plant to a new location in Top view, place your mouse pointer on it. When the **"Move" handle** appears, select the plant and drag it where you want it.

Moving multiple plants

To move multiple plants at one time, you have two options:

Choose **Drag Select** from the **Edit** menu and then click and drag in Top view over the plants you want to move. After you define all the plants, release the mouse. Next, click and drag the mouse on one of the plants you selected. All the selected plants will move.

Hold down the **Shift** key and click on each plant you want to move. When all the plants are selected, release the **Shift** key. Next, click on one plant and drag the mouse.   All the selected plants will move.

Moving plants with the keyboard

By pressing the arrow keys on your keyboard, you can incrementally move a selected plant up, down, left, or right. Repeat the commands as many times as necessary.

Change a plant's size

Sometimes a plant looks too big, or not big enough, for the design. In such cases you can easily change the plant's size.

To change a plant's size:

1. **Click once on the plant to select it in Top view.**

    The small arrows that appear around the plant let you resize it.

2. **Hold the mouse pointer over an arrow, then click and drag the mouse to change the plant's size.**

    To increase the plant's width and height, drag the mouse away from the plant.

    To reduce the plant's width and height, drag toward the center of the plant. As you drag, the plant's current dimensions appear in Top view.

    If you change a plant's width, the height changes proportionally, and vice versa.

3. **To change a plant's size using precise dimensions, double-click it and change the dimensions in the Spec Sheet.**

    You can also select a plant, click the **Mini View** tab, and change settings in the miniature Spec Sheet that appears.

    For details on using the Spec Sheet, see **Revising a plant using its Spec Sheet**.

Copy plants

Once you have created and refined a plant, you can copy it. Plants retain all dimensions and colors of the original.

To copy a plant, select it and choose **Copy** from the **Edit** menu. Next, select **Paste** from the **Edit** menu to make the copy appear. Move the copied plant in the design as needed.

Delete a plant

If you decide that a certain plant isn't right for your design, you can delete the plant. You have the following options:

To delete a single plant, click it and then press the **Delete** key. You can also select **Delete** from the **Edit** menu.

To delete multiple plants, hold down the **Shift** key, click each plant you want to delete, and then press the **Delete** key.

Note: If you make a mistake while resizing or repositioning a plant, you don't have to delete it and start over again. You can undo the previous action by selecting **Undo** from the **Edit** menu.

Add specific plants using the Plant Search window

The Plant Search window gives you access to LandDesigner 3D's extensive database of trees, shrubs, and greenery. Use this feature to add a particular species to your design, or to replace a generic plant with a specific one.

Plants in the Plant Search window show a photograph or illustration, as well as detailed information on size, care, and use.

To locate a specific plant:

1. **Open the Plant Search window using one of the following methods:**

   § To locate a specific plant, click the Search Plants button in the Object toolbar.   Note that you cannot see the Object toolbar if   you have Dynamic F/X selected on the Step-by-step toolbar.

   § To replace a generic plant in your design with a specific one, double-click the plant in Top view. In the plant's Spec Sheet that appears, click the **Replace With** button. (The next section explains how to use plant Spec Sheets.)

   The Plant Search window appears.

   Note: If you are replacing a selected plant, the **Replace Plant With** window appears. This window looks like the Plant Search window, but you can only select a single plant to replace the plant in your design.
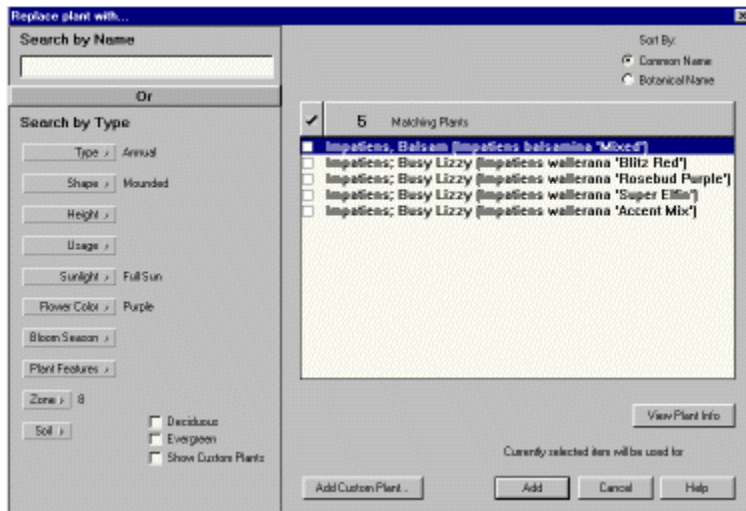
2. **To search for plants by common name or botanical name, enter all or part of the name.**

3. **To search for plants by different criteria and characteristics they possess, select one or more attributes.**

   For example, you can click **Type**, **Shape**, and **Height** and select attributes for these categories from the resulting lists.

   After you have chosen a type, representative plant shapes appear when you click the Shape list.

   Most attributes are self-explanatory. The **Zone** button refers to **USDA hardiness zones**, which subdivide the U.S. according to minimum temperatures at which plants can survive. Click the **Zone**

button and select your zone from the resulting list. If you don't know your zone number, click **Map** from the **Zone** menu and click your zone in the map.

As you increase the number of search attributes, you decrease the number of plants LandDesigner 3D finds. If you select too many search attributes, your search may find no plants.

If you completed the interview when you started your design, the default zone and soil settings correspond with your answers. For details on this interview, see **Start Your Design**.

4. **To further limit a search to find deciduous plants, evergreens, or previously defined custom plants, click the appropriate check boxes.**

For details on defining plants of your own, see **Add your own plant records**.

5. **To sort the plants found in the search, click Common Name or Botanical Name.**

The Matching Plants list shows which plants LandDesigner 3D found. Scroll through the list to see all the matches. The total number of matches is shown above the list.

6. **To learn more about a particular plant found in your search, click its name in the Matching Plants list and then click the View Plant Info button.**

The Plant Search window displays a picture of the selected plant and information about it.

Once you select a plant, you have the following options:

§ To read a description of the selected plant, click the **Description** tab. To read about the plant's attributes, click the **Attributes** tab.

§ To see and read about the next plant found in your search, click **Next Plant** or **Prev**(ious) **Plant**.

§ To return to the Plant Search window, click the **Close** button.

7. **To add a plant to the Your Object Bar menu in the Object toolbar, click the plant to place a check mark next to it. Select as many plants as you like, and then click** Add **to add them all. (If you are replacing a selected plant in your design, select a single plant, and then click Replace.)**

8. **To quit the Plant Search window without adding plants to Your Object Toolbar, click Cancel.**

If you entered the Plant Search window through the **Plants Search** button on the Object toolbar, you will return to the Designer.   If you added plants to the toolbar, **Your Objects Toolbar** appears with the plants you selected.   You can drag them into your design.

If you entered the Plant Search window through the Spec Sheet, the selected plant becomes the new selection in a plant's Spec Sheet.

Note: Your Object toolbar retains the items found in all searches. If the menu becomes too congested, you can delete individual items or clear the entire toolbar. To delete an item, right-click the item and select **Remove This Object**. To clear the toolbar, right-click any item, and then select **Clear Your Object Bar**. Or, select **Clear Your Object Bar** from the **Edit** menu.

Revising a plant using its Spec Sheet

You can use a plant's Spec Sheet to revise its size, appearance, and other properties.

Note: If you click the **Mini View** tab, a portion of the Spec Sheet appears in the Mini View on the left side of the window. You can see the plant's name and revise the plant's width, height, and color. To open the full-sized Spec Sheet from this miniature version, click **Details**.

1. **To open a plant's Spec Sheet, double-click the plant.**

   You can also **right-click** the plant and then select **Specs** from the menu that appears.

   The Spec Sheet includes the current settings for the selected plant. You can revise any or all of these settings.

2. **To open the Plant Search window and replace the selected plant with another, click the Replace With button. This opens the Plant Search window.**

   On the Plant Search window, locate the plant you want to use.   For instance, you may want to replace a generic plant with a specific variety.   Once you have located the plant, click OK to return to the plant Spec Sheet.

3. **Set the plant's dimensions by entering values in the Width and Height fields.**

4. **To return the plant to its original dimensions, click the Original Size button.**

5. **If you are satisfied with the size and location of a plant, you can lock its settings to make sure they aren't changed accidentally.**

   To lock the plant's size, click the **Lock Size** box.

   To lock the plant's size and location, click the **Lock Size & Location** box.

6. **To assign a plant a different flower color, click the Flower Color list and select a color.**

7. **To display the plant by its size at a certain age, enter an age and then click Size Based on Age.**

   The plant's height and width will change, but the amount of its branches and foliage will not.

8. **Click the other tabs in the Spec Sheet to view more information about the selected plant.**

   By default, the Basics tab appears, as shown in the previous illustration. Click the **Plant Info** tab, for example, to see descriptions and attributes of the selected plant. For details about the options in the other tabs, see **Using Spec Sheets**.

9. **Click OK to close the Spec Sheet and return to the Designer.**

Add your own plant records

If you can't locate the plant you need in the Object toolbar or the Plant Search window, you can define it yourself and add it to LandDesigner 3D.

To add your own plant record:

1. **Open the Plant Search window by clicking the Search Plants button in the Object toolbar.**

2. **Click the Add Custom Plant button in the Plant Search window.**

    The Add My Own Plant window appears.

3. **In the Common Name field, type the name of the plant you want to add.**

4. **Click the Type and Shape buttons and select the closest matching plant type and shape from the resulting menus.**

    The type and shape you select here will determine how LandDesigner 3D displays your plant in the 3D view.   LandDesigner 3D offers you hundreds of combinations of plant type and shape, so you should be able to find one that looks similar to your custom plant.

5. **To further customize your plant, enter other attributes under Optional Information.**

6. **To associate a scanned photograph or bitmap to your custom plant record, click Browse and select the graphic from the file navigation window. A preview of the graphic appears when you select it.**

7. **When you finish defining the custom plant, click OK.**

    The Plant Search window reappears with the custom plant highlighted in the Matching Plants list. Be patient; this operation might take a few seconds.

8. **To add the highlighted custom plant to the Object toolbar, make sure its check box is selected in the Matching Plants list.**

9. **Click Add to add the selected plant and exit the Plant Search window.**

    To change information about a custom plant later, open its Spec Sheet and click Edit Custom Plant.

Add garden beds and hedges

If you want to quickly lay out an entire bed of plants rather than individually selecting and plotting plants, use the Garden Bed wizard.

To begin adding a garden bed, select the **Design** phase in the Step-by-step toolbar and then click **Gardens**. A selection of garden bed shapes appears in the Object toolbar. Use the wizard to lay out the bed. If you need help, click the **Guide** tab at the left side of the window.

To add a garden bed to your design:

1. **Define the shape of the bed and drag it into the Designer.**

    This is Step 1 of the Garden Bed wizard. You have several options:

    Pick the desired shape of garden bed from the Object.   If the shape you want is not available, use the **Free-form Bed** tool option and then select one of the following shapes from the Draw Type button to the right of the toolbar.

    Select the rectangular or circular shape.
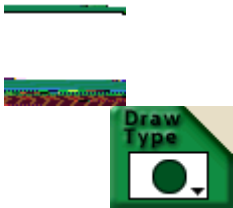
    In Top view, click and drag to define the size of the shape. When you finish, the object appears.
    Select the Point-to-Point Curve tool.

    Each time you click in Top view, you define one curve of a free form, curved shape. Continue clicking until you define a closed shape. To end the shape, **double-click** on the last point or press the **Esc** or **Backspace** key. The shape fills in.
    Select the Point-to-Point Line tool.
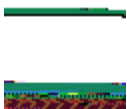
    Each time you click in Top view, you define a side of a free-form shape. Continue clicking until you define a closed shape. To end the shape, **double-click** on the last point or press the **Esc**, **Enter**, or **Backspace** key. The shape fills in.
    Select the Freehand tool.

    In Top view, click and hold the mouse button down while moving the mouse.   The shape will be drawn as you move the mouse. Draw the line until you have completed the shape.   You do not

have to finish on the point where you started.

2. **Once the garden bed is in the Designer, reposition it and reshape it as necessary.**

   Again, you have several options:

   To move the bed, hold the mouse pointer within it. When the "Move" **handle** appears, click and drag the bed where you want it.

   To resize the entire bed, click and drag over one of the outer arrows.

   To reposition one of the bed's points, hold the mouse pointer over one of the inner arrows. When a "Stretch" handle appears, click and drag the point to a new location.

   To reposition one of the bed's sides, hold the mouse pointer over one of the inner arrows. When a "Pull" handle appears, click and drag the side to a new location.

   To rotate the bed, select it and click the dot that appears next to it. When a "Spin" handle appears, drag the handle.

   You can also reshape the bed by right-clicking the "Pull" handles of particular points and using the resulting menu options. See **Edit points of objects** for more details.

3. **Click the Next button to move to Step 2 of the Garden Bed wizard.**

   In this step, you add plant clusters to fill the bed.

4. **Drag plant clusters from the Object toolbar into the bed you defined.**

5. **Click the Next button to move to Step 3 of the Garden Bed wizard.**

   If you added predefined clusters of plants to your garden bed in the previous step, you can use this step to revise individual plants within the clusters.

   Go to the **Generic Shapes** menu and drag in generic plants that you can replace later with particular species. For more details, see **Using a plant's Spec Sheet**.

   Use the Plant Search window to locate specific plants, add them to Your Object Bar, and drag them into your garden bed. See **Using the Plant Search window** for more details.

   To quickly create a row of one type of plant, select the plant on the Object toolbar, click the **Draw Type** button, and then click the **Hedge** button.

   Move your mouse to Top view, click to select the first point and click where you want it to end. The hedge draws after you click the second time.

6. **To change a cluster of plants, right-click on the bed and select Ungroup.**

   You can also select the bed and then select **UnGroup Objects** from the **Edit** menu. The plants in the bed become independent. You can then resize, reposition, or delete individual plants as needed.

   If you want to regroup the plants into a cluster after you finish, click the **Drag Select** button on the Top View toolbar and drag over the group. Next, select **Group Object** from the **Edit** menu.

7. **Click the Next button to move to the last step of the wizard and apply edging to the garden bed.**

   Select the type of edging you want from the Object toolbar, then move your mouse to Top view and define the edging shape.

   For complex edging shapes, use one of the Draw Type tools to define the points on your design. Each time you click in Top view, you define a point of the shape. Continue clicking until you define the shape you want. To end the drawing, click on the last point, right-click, or press the **Esc**, **Enter**,

or **Backspace** key.

If you need to revise the shape of the edging, see the options in step 3 of this procedure.

8. **Switch to 3D view and review your design.**

Click the **3D** tab in the Top View toolbar to go to 3D view. If changes are needed, return to Top view to make them.

Define ground cover with the drawing tool

Besides all the tools for adding generic and specific plants, LandDesigner 3D lets you quickly define an area of any shape or length and assign it a vine growth or ground cover.

To define a ground cover area with the drawing tool:

1. **Select any generic ground cover plant in the Object toolbar.**

    Select Plants in the first Category button, Ground Cover in the second, and Generic Shapes in the last button menu.

2. **With the plant selected, click the Draw Type button and then define the ground cover area you want.**

3. **Select one of the following Draw Types from the menu and define the shape in Top view.**

    Select the rectangular or circular shape and drag to define the size of the shape. When you finish, the object appears.

    Select the Point-to-Point Curve tool.

    Each time you click in Top view, you define one curve of a free form, curved shape. Continue clicking until you define a closed shape. To end the shape, **double-click** on the last point or press the **Esc** or **Backspace** key. The shape fills in.

    Select the Point-to-Point Line tool.

    Each time you click in Top view, you define a side of a free-form shape. Continue clicking until you define a closed shape. To end the shape, **double-click** on the last point or press the **Esc**, **Enter**, or **Backspace** key. The shape fills in.

4. **If necessary, reshape and resize the plant area in Top view.**

    To move the plant area, hold the mouse pointer within it. When the "Move" **handle** appears, click and drag the plant area where you want it.

    To resize the entire plant area, click and drag the mouse pointer over one of the outer arrows.

    To reposition one of the area's points, hold the mouse pointer over one of the inner arrows. When a "Stretch" handle appears, click and drag the point to a new location.

    To reposition one of the area's sides, hold the mouse pointer over one of the inner arrows. When a "Pull" handle appears, click drag the side to a new location.

    To rotate the area, move the mouse over the dot that appears next to it when it is selected. When a "Spin" handle appears, click and drag the handle to rotate the area.

    You can also reshape the area by right-clicking the "Pull" handles of particular points and using the resulting menu options. See **Add and remove points of objects** for more details.

5. **Switch to 3D view and review your design.**

    Click the **3D** tab in the Top View toolbar to go to 3D view. If changes are needed, return to Top view.

Add objects

You can add other objects besides plants to your landscape designs. For example, you can add lawn chairs, and barbecue grills. This section explains how to use these objects in your designs.

What do you want to do?

Find objects

Position objects

Use an object's Spec Sheet

Add colors and textures

Reshape objects

Draw your own object shapes

Import a deck from 3D Deck

Create your own objects

Create your own textures

Find objects

You can locate objects you want to use in your landscape designs by using the Category buttons in the Object toolbar or by clicking the **Search Objects** button and using the Object Search window.

The Step-by-step toolbar helps you add objects at the right time and also takes you to the right menus for selecting objects of interest. In some steps, the Object toolbar is not available. See **Use the Step-by-step toolbar** for details.

What do you want to do?

Find objects in the Object toolbar

Search for objects

Find objects in the Object toolbar

1. **If necessary, click the Top tab in the Top View toolbar to go to Top view.**

    You must be in Top view to add objects in the Designer.

2. **In the Object toolbar, click the first Category button and select the type of object you want to add.**

    For example, you can click the button and select Accents from the resulting list. The related accent items appear in the Object toolbar.

    To see more objects, you can stay within the Accents category or switch to a different category.

    To stay within the Accents category and view different objects, click the next Category button. A menu appears, and you can make a new selection. Note that not all categories have a second Category button.

    To switch to a different category, click the first Category button again and make a different selection, such as *Furniture* or *Structures*. Note that the buttons are hierarchical, meaning that your choice in a button menu determines the options that appear in the next button menus.

    A brief description of the object usually appears when you hold your cursor over it in the toolbar.

3. **When you find the item you want for your design, click its icon in the Object toolbar and drag it into Top view.**

    You can also place the object in Top view by clicking once on the object and then clicking once inside Top view where you want the object.

    Note: Objects that you can shape yourself behave differently. For details, see **Draw your own object shapes**.

4. **When the object is in Top view, position it properly.**

    For details, see **Position objects**.

Search for objects

LandDesigner 3D lets you search for objects you can't find immediately in the Object toolbar.

To search for an object:

1. **Click the Objects button under Search in the Object toolbar.**

    The Object Search Engine window appears.

2. **In the Search Terms text box, type one or more words that describe the object.**

    For example, type hammock or bench.   You can also type part of a word, such as "sprink" to find sprinkler objects.

3. **Use the Advanced Options section to narrow the scope of the search.**

    When you select one of the Advanced Options attributes, only objects that have that property and match your search words will be found.

    Note: Use the Advanced Options with care. If you specify impossible combinations, no matches will appear.

4. **Click Search Now to search for matches. The matches are listed in the center box.**

    The matches will be listed in the box on the left.

5. **Scroll through the list of objects. Place a check in the check box next to any objects that you would like to add to the Designer toolbar.**

    (Click an item to view it in the preview window.)

6. **When you have selected the items you want to add, click the Add button.**

Note: The Your Object Bar menu retains the items found in all searches. If the menu becomes too congested, you can delete individual items or clear the entire toolbar. To delete an item, right-click the item and select Remove This Object. To clear the toolbar, right-click any item, and then select Clear Your Object Bar. Or, select **Clear Your Object Bar** from the **Edit** menu.

Position objects

Use the Top view in the Designer to reposition and resize objects. You use the 3D view to see the effects of your work. Any changes you make in Top view will also appear in 3D view.

What do you want to do?

Move objects

Position decorations and smaller objects

Select small objects below large objects

Place smaller items on larger objects

Copy objects

Delete an object

Move objects

Elevation of dropped objects

Each object you drop into Top view is assigned a logical elevation, or *height above ground*. LandDesigner 3D places most objects on the ground, but there are exceptions. An outdoor place setting drops to a table, for example. You might want to revise an object's elevation. For example, you can change the elevation of objects that sit on a slope. For details, see **Position decorations and smaller objects**.
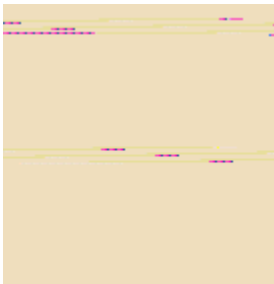
Move objects with the mouse

To move an object to a new location in Top view, place your mouse pointer on it. When the "Move" **handle** appears, click and drag the object where you want it.

If necessary, use the **Zoom tools** to see the object better.

Move multiple objects

To move multiple objects at one time, you have two options:

Choose the **Drag Select** option from the **Edit** menu and then click and drag in Top view over the items you want to move. After you define all the items, release the mouse. Next, click and drag the mouse on one of the objects you selected. All the selected objects will move.

Hold down the **Shift** key and click on each object you want to move. When all the objects are selected, release the **Shift** key. Next, click and drag the mouse on one object. All the selected objects will move.

Move objects with the keyboard

By pressing the arrow keys on your keyboard, you can incrementally move selected objects up, down, left, or right. Repeat the commands as many times as necessary.

Position decorations and smaller objects

Once you finish adding the main objects in your design, you can add decorative elements such as flowerpots and outdoor lamps.

As a rule, do not add decorations until after the major objects are in place and the right size. This will allow you to experiment freely without having to reposition every small object.

Decorative items are available from the Object toolbar, just like larger objects. When positioning smaller objects, you use many of the same tools as for larger ones.

If necessary, use the **Zoom tools** to see smaller objects better.

If you have selected several objects and want to deselect one without deselecting them all, right mouse click on a selected object.   A popup menu will appear that lists all the selected items with check marks next to them.   Click on an item to deselect it.

Tip: If you are having trouble selecting a small object, try zooming in to make the object appear larger. Or, use the multiple selection tool in the Top View toolbar to select only the single object.

Select small objects below large objects

If you need help selecting smaller objects when they are positioned below larger ones, follow these steps.

1. **Right-click on the larger object. A menu opens.**
2. **Choose Select Object from the menu.**
3. **Select the smaller object's name from the next pop-up menu.**

Tip: If you are having trouble selecting a small object that is not covered, try zooming in to make the object appear larger. Or, use the multiple selection tool in the Top View toolbar to select only the single object.

Place smaller items on larger objects

You may notice that if you position a smaller item in Top view on a larger object, the smaller item falls nicely onto the object below. LandDesigner 3D uses this logic to place table settings on an outdoor table, or items on a deck.

However, if you then change the height of the table or deck, the height of the smaller items will not change. Your place settings, for example, might be sliced by the table. To fix this problem, change the Height Above Ground value of the smaller item. The Height Above Ground represents the *bottom* of the object.

To change the Height Above Ground of an object:

1. **Open the Spec Sheet for the item by double-clicking on the item.**

2. **Enter a new Height Above Ground value so the bottom of the object rests on top of the larger object.**

    For example, to make place settings appear to rest properly on a resized table, change the Height Above Ground for the place settings to equal the new height (not the Height Above Ground) of the table.

3. **Click OK to close the Spec Sheet and see the results in the 3D window.**

    You might have to experiment with the Height Above Ground setting until the smaller item appears to rest on the larger one.

    Note that LandDesigner 3D only drops and raises objects to surfaces that are large and wide enough to accommodate the smaller object. If necessary, resize one or both of the objects.

Copy objects

Once you have created and refined an object, you can duplicate it by copying and pasting it. Copies retain all dimensions, colors, and materials of the original.

To copy an object, select it and choose **Copy** from the **Edit** menu. Next, select **Paste** from the **Edit** menu to make the copy appear. Move the copied object in the design as needed.

Delete an object

If you decide that a certain object isn't right for your landscape design, you can delete the object. You have the following options:

To delete a single object, select it and then press the **Delete** key. You can also select the **Delete** command from the **Edit** menu.

To delete multiple objects, hold down the **Shift** key, select each object you want to delete and then press the **Delete** key.

Note: If you make a mistake while resizing or repositioning an object, you don't have to delete it and start over again. You can undo the previous action by selecting **Undo** from the **Edit** menu.

Use an object's Spec Sheet

Spec Sheets give you many options for revising an object's size, appearance, and other properties.

For information on revising plants in a spec sheet, see **Revising a plant using its Spec Sheet**.

Note: If you click the **Mini View** tab, a partial version of the Spec Sheet appears in the Mini View on the left side of the window. You can see the selected object's name and revise the object's width, height, and depth. To open the full Spec Sheet from this partial version, click the **Details** button.

1. **To open an object's Spec Sheet, double-click the object.**

   You can also **right-click** the object and then select Specs from the menu that appears.

2. **Set the object's dimensions by entering values in the Width, Depth, and Height fields.**

3. **To return the object to its original dimensions, click the Original Size button.**

4. **If you are satisfied with the size and location of an object, you can lock its settings to make sure they aren't changed accidentally.**

   To lock the object's size, click the **Lock Size** box.

   To lock the object's size and location, click the **Lock Size & Location** box.

5. **Click OK to close the Spec Sheet and return to the Designer.**

Add colors and textures

Spec Sheets let you assign distinctive colors, textures, and styles to many objects in your design.

You can change these materials at any time in the design process. If you move objects after applying materials, the materials move with the objects.

To add materials to objects in the Designer:

1. **Double-click in Top view on the object whose style you want to edit.**

    The object's Spec Sheet opens. The Materials section displays *panels* for each style assigned to different parts of the object. For example, a park bench might have a panel for its legs and one for the bench, or a fountain might have a panel for its spout, the pool and the water.

2. **To copy material shown in one panel of the Spec Sheet to another panel, click the first panel, drag the mouse over the panel you want to change, and release the mouse.**

3. **To change a material, click a panel.**

    The Choose Materials window opens for the selected style.
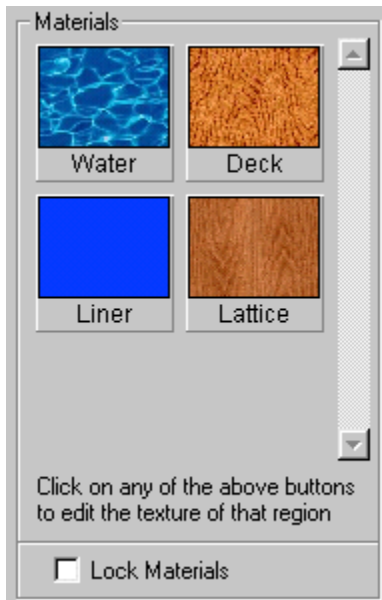
4. **Use the following options in the Choose Materials window to find the style you want:**

    To view different material types, click one of the category buttons on the left side of the window.

    Once you select the category you want, scroll through the displayed panels to look at your choices. Place your mouse pointer on a material to see a quick description of it. To create your own material, see **Creating your own materials**.   If you have already created a custom material, it is available under the Special menu of the Choose Materials window.

5. **When you find a material you want, click its panel and click OK.**

    The Choose Materials window closes and the Spec Sheet reappears. The style you chose appears in the Materials area.

6. **To assign the material permanently to the object, click the Lock Materials box.**

7. **Click OK to close the Spec Sheet and return to the Designer views.**

Draw your own object shapes

LandDesigner 3D provides many predefined objects, but it also gives you the ability to create your own shapes.   Your drawing options are determined by the type of object you need to create.

Shapes you define fall into two basic categories: closed shapes and lines.

What do you want to do?

Define closed shapes (e.g. driveways, decks)

Define line shapes (e.g. fences, power lines)

Define closed shapes

Follow these steps to define your own closed shapes such as decks and driveways.

1. **Select an appropriate object in the Object toolbar at the bottom of the screen.**

   If custom shapes are available, the **Draw Type** button to the right of the Object toolbar changes appearance when you select an object. Click this tool to see which shapes are available.

   If an object does not have a custom shape selection, the Draw Type button looks like the illustration below. Drag the predefined shape into Top view and resize it later.   See **Reshape objects** for more details.
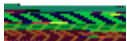
2. **With the object selected, click the Draw Type button to the right of the toolbar.**

3. **Select one of the following Draw Types from the menu and define the shape in Top view.**

   Select the rectangular or circular shape and click and drag in Top view to define the shape. When you finish, the object appears.

   Select the Point-to-Point Curve tool.

   Each time you click in Top view, you define one curve of a free-form, curved shape. Continue clicking until you define a closed shape. To end the shape, **double-click** on the last point or press the **Esc**, **Enter**, or **Backspace** key. The shape fills in*.*

   Select the Point-to-Point Line tool.

   Each time you click in Top view, you define a side of a free-form shape. Continue clicking until you define a closed shape. To end the shape, **double-click** on the last point or press the **Esc**, **Enter**, or **Backspace** key. The shape fills in.

   Select the Freehand tool.

   Move your mouse to Top view to the starting point of the shape.   Click and hold the mouse button down.   The shape will be drawn as you move the mouse.   Let go of the mouse button to stop drawing. You do not have to finish on the point where you started.

To reshape these objects in Top view, see **Define line shapes**.

Define line shapes

Follow these steps to define line shapes such as fences and power lines.

1. **Select an appropriate object in the Object toolbar at the bottom of the screen.**

    If line shapes are available, the Draw Type tool at the right of the Object toolbar changes appearance when you select an object.

2. **With the line object selected, click the Draw Type button to the right of the toolbar.**

3. **Select one of the following Draw Types from the menu and define the shape in Top view.**
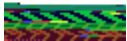
    Select the Multi-Line tool.
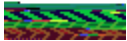
    Move to Top view and define the line shape. Each time you click in Top view, you define a point on the shape. Continue clicking until you define a shape you like. To end the shape, double-click on the last point or press the Esc, Enter, or Backspace key. The shape fills in. The object appears in Top view.

    Select the Line tool.

    Move to Top view. Click once to begin the line, then move the mouse to the endpoint and click again. The object appears in Top view.

    Select the Curved Line tool from the Draw Type menu.

    Move your mouse to Top view and define the shape. Each time you click in Top view, you define an arc of the shape. Continue clicking until you define a shape you like. To end the drawing, double-click on the last point or press the Esc, Enter, or Backspace key. The object appears in Top view.

    Select the Freehand tool from the Draw Type menu.

    Move your mouse to Top view and point to the start point of the shape.   Click and hold the mouse button down.   The shape will be drawn as you move the mouse.   Draw the line until you have completed the shape.   You do not have to finish on the point where you started. The object appears in Top view.

Reshape objects

This section explains how to change the shape of objects once they're in Top view. You can change the object's size and rotate the object. If you define your own object shapes, you can reshape them by using the "Pull" and "Stretch" **handles**.

What do you want to do?

For predefined objects:

Change an object's size

Rotate objects

For objects you shape:

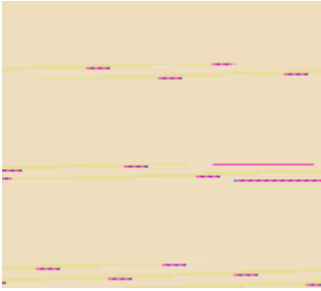**Pull and stretch objects**

Edit points of objects

Change an object's size

Sometimes objects look too big, or not big enough, for the design. In such cases you can easily change the object's size.

To change an object's size:

1. **Click once on the object to select it in Top view.**

    The small arrows that appear around the object let you resize it.

2. **Hold the mouse pointer over an arrow, then click and drag the mouse to change the object's size.**

    To increase the object's width and depth, drag the mouse away from the object. To reduce the object's width and depth, drag toward the center of the object. As you drag, the object's current dimensions appear in Top view.

3. **To change an object's size using precise dimensions, double-click it and change the dimensions in the Spec Sheet.**

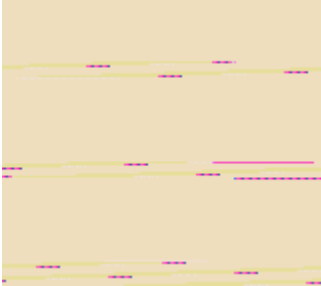   For details on using the Spec Sheet, see **Use an object's Spec Sheet**.

Rotate objects

If an object is in the right location but the angle is wrong, you can rotate it.

To rotate an object:

1. **Click once on the object to select it in Top view.**

   The dot that appears beneath the object is the spin **handle**.

2. **Hold the mouse pointer over the spin handle, then click and drag the mouse to rotate the object.**

Pull and stretch objects

Objects you draw yourself have additional options for reshaping. When you select an object, you see a set of outer **handles** and a set of inner handles, as shown in the illustration.

You can resize the entire object proportionally by clicking and dragging the mouse pointer over one of the outer arrows.
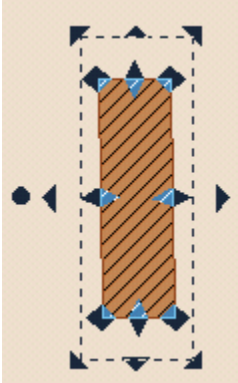
Use the inner handles to reshape objects.

To reposition one of the object's points, hold the mouse pointer over one of the inner arrows around the object. When a "Stretch" handle appears, drag the point to a new location.

To reposition one of the object's sides (or curves), hold the mouse pointer over one of the inner arrows around the object. When a "Pull" handle appears, drag the side to a new location.

Edit points of objects

Once you add your own object shapes in Top view, you can reshape them by right-clicking the "Pull" **handles** of particular points and using the resulting menu options.

Note: You only see this menu after right-clicking a Pull handle. The options are not available with Stretch handles or Move handles.

You have the following options for editing points:

Split (add a point). If you select Split, LandDesigner 3D adds a new point to the shape. You can then use the Pull handles and Stretch handles to reshape the object.

Join (remove a point). If you select Join, LandDesigner 3D removes the selected point and fills in the shape by redrawing the line between the two closest points.

Change curve/line. If you select this option, LandDesigner 3D changes the selected curve to a line. If you selected a line, it changes to a curve.

See also:

Pulling and stretching objects

Additional features

This section explains how to use the extra features included in LandDesigner 3D.

What do you want to do?

Record Walkthroughs and Snapshots

Take a 3D photo

Use the measuring tape

Use the Shopping List

Save your design

Print your design

Share your design

Connect to the Web

Use the Shadow Caster

In Top view, the Shadow Caster feature simulates shadows in your landscape design based on time, date and location. Use the Shadow Caster to see how the sun affects your landscape over a day or a year. For more information, see Chapter 2 of the Design Guide, *Using Sun and Shade*.

Before using the Shadow Caster, adjust the compass in Top view. Compass changes affect shadow simulations. See **Define the lot** for instructions on using the compass.

To use the Shadow Caster:

1. **Click the Design button in the Step-by-step toolbar and then click Dynamic F/X.**

2. **If necessary, move to Top view by clicking the Top in the Top View toolbar.**

    The Shadow Caster is not available in 3D view.

3. **Click the Mini View tab.**

    The Shadow Caster controls and Growth Over Time controls appear. For details on using the Growth Over Time feature, see **Project Growth Over Time**.

4. **Set the date, time, and latitude you want to simulate.**

    You can enter these values directly or click the up and down arrows. When entering values directly, use the conventions and symbols shown in the fields.

    For information about your city's latitude, call your local branch of the United States Geological Survey. Find them online at www.usgs.gov. You can also go online at www.census.gov/cgi-bin/gazetteer where you can enter your location and get your latitude.

5. **Drag the Animate Shadows slider bar to determine how slowly or quickly the shadow effect occurs.**

6. **Click Over a Day or Over a Year to determine the period the shadow effect simulates.**

    LandDesigner 3D casts shadows over your design. Watch how the sun and shadow affect your landscape.

Project Growth Over Time

Use the Growth Over Time feature of LandDesigner 3D to see how the plants in your design will grow over various time periods. You can use these projections, for example, to determine how closely you should position adjacent plants. These changes can take some time to draw, especially if you have several plants. Please be patient.

You can observe Growth Over Time in the 3D view or Top view.

To use the Growth Over Time feature:

1. **Click the Design button in the Step-by-step toolbar, and then click Dynamic F/X.**

2. **Click the Mini View tab.**

   The Shadow Caster controls and Growth Over Time controls appear. For details on using the Shadow Caster feature, see **Use the Shadow Caster**.

3. **In the Years field, enter the number of years into the future you want to project plant growth.**

   You can enter this value directly or click the up and down arrows.

4. **To project the plant's growth over the number of years you specified, click Age Plants.**

   The plants increase in size accordingly.

   Just planted

After 5 years

5. **To reset the plants to their previous age and size, click Reset Age.**

The plants will automatically revert to their original age when you switch to any other tab or design phase within the step-by-step toolbar. To permanently change a plant's age, use the Spec Sheet. For example, you can make an oak 10 years older than younger plants in your design.

Note: The plants that grow over time include trees, shrubs, vines, cacti, ornamental grasses, ferns, perennials, and roses.

Project Seasonal Change

Use the Seasonal Change feature of LandDesigner 3D to see how the plants in your design look in various seasons. You can check seasonal changes in any design step by moving to the 3D view and then clicking the **Mini View** tab.

To use the Seasonal Change feature:

1. **Move to the 3D view.**

    Click the **3D** tab on the toolbar if necessary.

2. **Click the Mini View tab.**

3. **Drag the Seasonal Change slider bar, found in the lower left corner, to the season you would like to see.**

Record Walkthroughs and Snapshots

LandDesigner 3D lets you save your favorite views and animated tours in each design. You can then view these Snapshots and Walkthrough tours at any time. Walkthroughs and Snapshots let you quickly communicate your ideas with landscape contractors and designers. You can even share designs with other LandDesigner 3D users using your Internet connection!

What do you want to do?

Take Snapshots

View Snapshots

Record a Walkthrough

Play back a Walkthrough

Use Internet Walkthrough and Design Sharing (Virtual Tour)

Take Snapshots

A Snapshot is a record of a favorite 3D view in your landscape design.   Snapshots are a good way to save a list of sites in your design for quick review.   In a sense, a snapshot is like a bookmark – it saves a position and a view in your design that you can return to later.

To record a Snapshot:

1. **Use the 3D view controls to show the area you want to record in the Snapshot.**

2. **Select Recorder Control from the Features menu, and then click Snapshots.**

    The Recorder Options window appears.

3. **Click the Take Snapshot button to store the Snapshot.**

4. **Type the name for your Snapshot in the Name field.**

    If you don't want to name the Snapshot, you can use the generic name LandDesigner 3D assigns automatically.

    You can view the Snapshot at any time.

5. **Click Close to exit the Recorder Options window.**

    You can now view the Snapshot in LandDesigner 3D whenever the saved design file is open.

View Snapshots

1. **Select Recorder Control from the Features menu, and then click Snapshots.**

2. **Select the Snapshot you want to view from the list.**

3. **Click Go to View to view the selected Snapshot.**

    To delete a Snapshot, select it in the list and click **Delete**.

4. **Click Close to exit the Recorder Options window.**

Record a Walkthrough

A Walkthrough is an animated 3D tour of your design in LandDesigner 3D.

To record a Walkthrough:

1. **Position the camera in Top view where you want to begin your Walkthrough.**

    You can further adjust this beginning view by switching to 3D view and using the navigation arrows in the Object toolbar.

2. **Select Recorder Control from the Features menu, and then click Walkthrough.**

    The Recorder Options window appears.

3. **Click Record to begin recording the Walkthrough.**

4. **Navigate through your 3D scene along the path you want to record.**

    The Walkthrough feature stores all of your movements as well as their speed.

5. **Click Stop to end the Walkthrough recording.**

    The Stop button only works while you are recording.

6. **Type a name for your Walkthrough in the Name field.**

    If you don't want to name the Walkthrough, you can use the generic name LandDesigner 3D assigns automatically.

7. **To save the recorded Walkthrough as an .avi video file, click the Save button.**

    LandDesigner 3D warns you that the file might be large and might take a long time to create. If you want to proceed, click Yes. When the file is complete, LandDesigner 3D prompts you to assign the file a name and directory path.

    The file is saved in .avi format, and can be opened and played outside LandDesigner 3D in a Windows video program.   You do not have to save an .avi file to play back the animated Walkthrough in LandDesigner 3D when the saved design file is open.

8. **Click Close to exit the Recorder Options window.**

Play back a Walkthrough

1. **Select Recorder Control from the Features menu, and then click Walkthrough.**
2. **Select the Walkthrough you want to view from the list.**
3. **Click Play to view the selected Walkthrough.**
4. **While the Walkthrough is playing, you can click Stop to halt the playback.**

    To delete a Walkthrough, select it in the list and click **Delete**.
5. **Click Close to exit the Recorder Options window.**

Change backgrounds and ground covers

If you don't like the default background image and ground cover 3D Sierra LandDesigner 3D uses in your landscape designs, you can change them.

Note: The 3D Ground applies to your entire design. It is different from ground covers you add from the Object toolbar, which apply only to particular planted areas.

To change your default background and 3D Ground:

1. **From the Design phase, click the 3D tab.**

2. **Select Options from the Edit menu, and then click the View tab.**

3. **To choose a new ground cover for your 3D Ground, click the Change 3D Ground button.**

4. **To choose a different background for your design, click the Change 3D Backdrop button.**

    To insert your own bitmap image, click Choose My Own. Use the Open window to select a *.bmp* file from your hard drive. Click Open when you have found the image.

    When you select a background, click **OK** to return to the 3D view options.

5. **Use the Material Picker window to find the ground cover you want.**

    To view different material types, click the material buttons on the left side of the window.

    Once you select a category, scroll through the displayed panels to look at your choices. Place your mouse pointer on a panel for a quick description of it.

6. **When you find a ground cover you want, click its panel and click OK.**

    The Material Picker window closes.

7. **Click OK to close the Options dialog box and see the new ground cover and background in the Designer.**

    The background and ground cover are applied to the entire design when seen in 3D view. Later you can add more ground covers to particular planted areas from the Object toolbar.

Prepare your background

You can prepare your own background images for landscape designs in the graphics program of your choice. You can also copy images from other applications or Web sites. Use the following guidelines to create the image:

Correct for accidental tilting and aspect ratio and adjust brightness and contrast as needed.

Size your image to a height of less than 480 pixels. Images with greater heights will appear centered in LandDesigner 3D, with the top and bottom truncated. The image can have any width, including panoramic dimensions of more than 1,000 pixels.

Save the background image as a 24-bit Windows Bitmap file (.BMP).

You're ready to open the image as your design background.

To use your own background in LandDesigner 3D:

1. **Select Options from the Edit menu.**

2. **Click the View tab.**

3. **Select Change 3D Backdrop.**

4. **Click on the Choose My Own button.**

5. **In the next window, select the file name.**
   Or, enter the directory path and file name for the background image.
   Or, use the window to locate and select the background bitmap file. See your Windows manuals if you need more information for using this window.

6. **Click Open to close the window and see the background.**

Use the measuring tape

The Measure tool in the Top View toolbar lets you measure the distance between any two points in Top view. Click the Measure tool, then click two points in the Designer—one where you want the measurement to begin, and the other where you want it to end. A line is drawn from the starting point to the ending point. A label appears in the middle of the line. The label shows the line length.

You can move, resize, or delete a measurement:

To move a measurement in Top view, click and drag it anywhere between its endpoints.

To resize or rotate a measurement, first click it to display its endpoints, then click and drag either endpoint.

To delete a measurement, select it and press the **Delete** key.

You can change the appearance of measurement labels.

To change label appearance:

1. **Double-click a measurement label. Or, right-click a label, and then click Specs.**
2. **Select a font, style, and type size for the label.**
3. **In the Effects box, select strikeout, underline, or color for label text.**
4. **Select Draw Border to place a line around the edge of the label.**
5. **Select Show Inches Only to display the measurement entirely in inches. (If you are using the Metric system, the option lets you select and display measurements in centimeters.)**
6. **Select a background color for the label.**
7. **Click OK to save the new settings.**

Other measurement tools

In addition to the Measure tool, LandDesigner 3D has other features that help you measure aspects of your design:

Dimensions in Top view. The Top view displays a plant or object's width and depth as you resize it. To resize a plant or object, click it to select it, then drag one of the arrows around it.

Standard versus metric units. By default, LandDesigner 3D uses standard (U.S.) units to display dimensions. To switch to metric units, select **Options** from the **Edit** menu, click the **View** tab, and click **Display Metric Units**. To switch back to standard units, repeat the previous steps.

Grid in Top view. To help you align objects and assess spatial relationships in Top view, you can display a grid over it. To turn on the grid, select **Options** from the **Edit** menu, click the **View** tab, and click **Display Grid**. You can also change the grid spacing, if necessary.

Use the Shopping List

Use the Shopping List to get a rough idea of how much your design might cost to build from scratch. The Shopping List also helps you keep track of selected design elements, as well as their quantities, unit prices, and subtotals.

1. **To see the Shopping List, select the Finish phase in the Step-by-step toolbar and then click Shopping List.**

   The Shopping List window appears. Each major category of design elements is shown as a plus/minus (+/-) button on the left side of the list.

2. **Click a category button to see a breakdown of costs within the category.**

   Click the button again to hide the details. When details are hidden, the category button appears with a (+) sign.

Related topics:

View all the objects in the list

View the notes

Modify prices

Adjust column widths

Export a Shopping List

Print a Shopping List

View all objects in the Shopping list

Most plants and objects you add to a design appear in the Shopping List. If you select **Options** from the **Edit** menu and then click **Show All on Shopping List** in the Program tab, all items will appear on the Shopping List.

To select only certain items to show on the shopping list, open the Spec Sheet for the item by double-clicking on the item in the Design window.   On the Price tab of the Spec Sheet, indicate whether the item should be added to the shopping list using the Add to the shopping list checkbox.

View the notes

Any personal notes that have been added to a Spec Sheet are shown in the shopping list.   If you want to add a note, open the Spec Sheet for the item, and use the Personal Notes tab to add the note to the item.

Modify prices

To modify the price of a particular object, **double-click** the object in the Top view to see its Spec Sheet. Click the **Price** tab and revise the price. Note that not all objects have prices.

Adjust column widths

The Shopping List has columns for an object's name, size, quantity, unit price, subtotal, and notes. To adjust the width of a column, move the mouse over the side of a column heading until the cursor changes to a   . You can then click and drag the mouse to resize the column.

Export a Shopping List

If you want to crunch the numbers for the estimated costs of your design, you can export the Shopping List to a text file. You can then import this file into a spreadsheet application such as Microsoft Excel.

Note: The Export Spreadsheet function creates a text file that is specifically formatted for spreadsheet applications. You can open the file with other programs, but you may need to manually align file information.

To export the Shopping List:

1. **Click the Export Spreadsheet button in the Shopping List window.**

2. **In the window that appears, enter a name for the shopping list in the File Name field.**

3. **If necessary, save the file to another directory on your drive.**

   By default, the file is saved to the C:\Sierra\Land3D\Designs folder.

4. **Click Export to export the Shopping List to its own file.**

5. **Open the Shopping List file in another program such as Excel or Notepad.**

Print a Shopping List

You can print the shopping list at any time.

To print a shopping list:

1. **Select Shopping List from the Features menu. Click the Print button.**

2. **Type a title to appear at the top of the report. Or, clear the Title text box to print the report without a title.**

3. **Check the columns you wish to see displayed in your printout.**

4. **If you have several identical items listed, you can combine items by checking the Merge Similar Items box.**

5. **Choose between large, medium and small font sizes.**

6. **Select the orientation for the printed shopping list. (Landscape orientation works best for most lists.)**

7. **Click OK to print.**

Set display and sound options

For a comprehensive list of these display options and a brief description of each, see **Options dialog box**.

What options do you want to set?

Layers

Sound options

Layers

Aside from the display controls in the Options dialog box, you can also change the Top view by displaying or hiding the following items in the Visible Layers list. For more details, see **Use layers**.

Foliage. When selected, plants are shown with full foliage. If you turn this option off, plants appear as circles.

Slope Detail. When selected, the ground displays any mound or holes you applied.

Utilities. When selected, the locations of all utilities such as property lines and water lines are shown in Top view.

Sprinkler Coverage. When selected, sprinklers appear with their coverage areas. If you turn this option off in Top view, the sprinklers appear alone.

Plant Labels. When selected, plant labels appear with their items in Top view. This option is off by default.

Your Notes. When selected, any notes you added to Top view are shown with the design.

Sound options

You have two options for controlling sound in the Options dialog box. To change these settings, select **Options** from the **Edit** menu and then click the **Program** tab.

Program Sounds. Select this option to turn the LandDesigner 3D sound effects on and off. By default the sound is on.

This option, like many in the Options dialog box, is a simple *toggle*, which means it works like an on-off switch. If your computer does not have a sound card and speakers, you will not hear the sound effects.

Walkthrough Sound. Use this list to select which sound effect you hear when navigating 3D view. By default, you hear footsteps. To hear an example of a new sound effect, select it in the list and click Audition. To choose a new sound for Walkthroughs, select it in the list and click **OK**.

Connect to the Web

You can connect to the World Wide Web directly and securely from LandDesigner 3D to get gardening help, problem-solving information, or to shop conveniently online.

To go to the World Wide Web from LandDesigner 3D:

1. **Click the Resources option on the Features menu.**

2. **In the window that appears, select a link to gardening related sites on the Internet.**

    Clicking one of these buttons will open your web browser and connect you to the site.   You must be connected to your ISP for this to work.

3. **The window also contains a list of additional references, including books, magazines, organizations and web sites of interest to gardeners.   You can click on the links to open your browser to these sites.**

For information on sending your design as an attachment to e-mail messages, see **E-mail your design**.

Use Internet Walkthrough and Design Sharing

You can use this feature to show another user your designs over an IP (Internet Protocol) network. Note that both you and the sender/recipient of the design need to be connected to an IP network and have LandDesigner 3D running on your computers. When connected, the sender's LandDesigner 3D display appears on the recipient's screen. You can even play a saved Walkthrough for the recipient.

To send your design to another computer:

1. **Select Recorder Control from the Features menu, and then click Virtual Tour.**

2. **Click Share a Design.**

3. **Type in the IP network number of the recipient, and then click Connect.**

    This number appears in the recipient's **View a Design** dialog box. This connects you to the recipient's computer. Now your display will appear on the second computer. You can take the recipient on a Walkthrough of your design by navigating in 3D view. Type notes to each other in the Edit Field inside the Design Sharing dialog box.

    The recipient can navigate within the design on his or her screen, but cannot change the view on your screen. Click **Let the other guy drive** to allow the remote user to navigate and change the view on your screen.

To receive a design from another computer:

1. **Select Recorder Control from the Features menu, and then click Virtual Tour.**

2. **Click View a Design.**

    Your IP address will be displayed. Give this number to the sender so he or she can enter it. Once the sender installs your address, his or her design will appear on your screen.

Quick reference

After you become familiar with LandDesigner 3D, use this Quick Reference section for explanations of each menu option, descriptions of the toolbars, and instructions for using the Spec Sheets.

What do you want to look up?

Menu reference

Toolbar reference

Spec Sheets

Improve performance

Terms in the Glossary

Menu reference

File menu. Use the File menu to open and save the files you create in LandDesigner 3D. You can also use File options to print designs, e-mail them, and export them as bitmap graphics.

Edit menu. Use Edit options to select, copy, group, delete, and lock objects. For information on the Options dialog, see **Options dialog**.

Features menu. Features options allow you to customize LandDesigner 3D. You can create custom objects and materials, and create and apply custom colors to objects. Features options also let you record Walkthroughs, Snapshots, and Photos. You can use Features options to start any of the LandDesigner 3D wizards.

View menu.. Use View options to switch between 2D and 3D views, zoom in or out, and search for plants and other objects.

Design Guide menu. Use Design Guide options to get tips and information for designing your landscape.

Help menu. Use this option to access the online help system and view credits, copyrights, and version information.

Click a menu to see its options. You can also open a menu by holding down the **Alt** key and pressing the key that matches the underlined letter in the menu name. For example, you can open the F̲ile menu by pressing **Alt** and **F**.

Note: Not all options are available at all times. Unavailable options appear dimmed.

File menu

Use the File menu to open and save the files you create in LandDesigner 3D. You can also use File options to print designs, e-mail them, and export them as bitmap graphics.

New
Opens a new Designer screen in LandDesigner 3D, where you can create a new design.

Open
Opens an existing LandDesigner 3D file.

Open Designer Gardens
Opens a LandDesigner 3D sample design. See **View sample designs** for instructions.

Save
Saves your current open file. See **Save your design** for instructions.

Save As
Saves the current design under a new name, leaving the original file unchanged.

Save as Sample File
Saves your design as a sample landscape, so you can use it again to develop other designs. You'll find these samples in the Open Sample dialog under the tab labeled "My Samples." See **Save your design** for instructions.

Mail This Design
Allows you to e-mail your design. You must have e-mail software on your computer to use this command. See **E-mail your design** for instructions.

Export Bitmap
Saves your current 3D View as a two-dimensional bitmap image, which you can later open in a graphics program. This option is only available while in 3D View. See **Export a design** for instructions.

Print
Prints the contents of either Top View or 3D View, depending on which window is active. For details on printing, see **Print your design**.

Print Preview
Displays the design on screen as it will appear when printed.

Print Setup
Use Print Setup to specify a printer, paper orientation, and type of paper used. Click the Options or Properties button to select advanced printing settings. Press F1 in Print Setup for online help.

Exit
Exits LandDesigner 3D.

Note: The names of recently opened design files appear in the File menu just above the Exit option. Click the file name to open the file.

Edit menu

Use Edit options to select, copy, group, delete, and lock objects. You can also use Edit options to clear your object toolbar and configure LandDesigner 3D's sound, view, and design review options.

Undo	Cancels your last action in the Designer.
Cut	Removes the selected item and puts it on the clipboard. You can then paste the item elsewhere. This command is available only if an item is selected. Cutting items to the clipboard replaces the contents previously stored there.
Copy	Copies the selected item onto the clipboard. You can then paste the item elsewhere. This command is available only if an item is selected. Copying an item to the clipboard replaces the contents previously stored there.
Paste	Inserts a copy of the clipboard contents into your design. This command is unavailable if the clipboard is empty.
Delete	Deletes the selected object in Top View.
Select All	Selects all objects in Top View.
Select None	Deselects all currently selected objects in Top View.
Drag Select	Selects multiple plants and objects in Top View. After selecting this option, click and drag your mouse over the appropriate plants and objects in Top View.
Group Objects	Binds multiple items together as a single grouped object.
UnGroup Objects	Turns grouped items into independent objects.
Lock Selected in Place	Locks a selected object in place to prevent it from being moved accidentally. When the selected object is locked, this menu option changes to Unlock Selected. If you select this option again, the object becomes unlocked.
Clear Your Object Bar	The Your Object Bar menu retains the items found in all searches. If the menu becomes too crowded, clear it by selecting this option.
Options	Use to configure LandDesigner 3D display and program settings. See **Options dialog** for complete information.

Features menu

Features options allow you to customize LandDesigner 3D. You can create custom objects and materials, and create and apply custom colors to objects. Features options also let you record Walkthroughs, Snapshots, and Photos. You can use Features options to start any of the LandDesigner 3D wizards.

Add your own Objects	This feature allows you to bring your own objects into the program.
Add your own Materials	This feature allows you to bring your own materials into the program.
Material Painter	This option allows you to create your own color schemes using existing patterns or designs from our database.
Wizards> Interview Wizard	This wizard asks you questions about your zone, climate, soil type and common or Latin name preferences. These become the defaults for the program. To change them, you must run the wizard again.
Wizards> Lot Wizard	The Lot Wizard takes you through the following three steps to define your lot: setting dimensions, laying down the property lines, and setting the compass. See **Define the lot** for instructions.
Wizards> House Wizard	The House Wizard helps you quickly build a facsimile of your home in the landscape design. See **Define your house** for instructions.
Wizards> Slope Wizard	The Slope Wizard lets you create slopes and grades. See **Define the slope of your lot** for instructions.
Wizards> Irrigation Wizard	Starts the Irrigation Wizard. The Irrigation Wizard helps you create an irrigation system for your design. See **Irrigation basics** for more information.
Wizards> Garden Bed Wizard	Starts the Garden Bed wizard. The Garden Bed wizard helps you quickly create garden beds, place plants, and set edgings. See **Add garden beds and hedges** for instructions.
Render> Render This View	Record a high quality photorealistic 3D image of your design. See **High-Resolution images using Raytracing** for instructions.
Render> Render Recorded Snapshots	Use this feature to render a Snapshot in 3D View.
Recorder Control> Walkthrough	Use this feature to record a Walkthrough in 3D View.
Recorder Control>	Use this feature to record a Snapshot in 3D View.

Snapshot

Recorder Control> Virtual Tour	Lets you share your designs with another LandDesigner 3D user over the Internet.
Dynamic F/X> Shadow Caster	Use this feature to see how shadows fall across your design in Top view. See **Use the Shadow Caster** for instructions.
Dynamic F/X> Growth Over Time	Use this feature to see how the plants in your design will mature over time. See **Project Growth Over Time** for instructions.
Dynamic F/X> Seasonal Change	Use this feature to see how the plants in your design change according to season. See **Project Seasonal Change** for instructions.
Design Review	The Design Review searches for possible design problems, from irrigation or wall measurement to tree locations and much more. See **Review your design** for more details.
Shopping List	The Shopping List keeps track of the plants you add to your design, including their quantities, and gives the subtotal for your entire design. This is an estimate. See **Use the Shopping List** for instructions.
Resources	Use this feature to access a variety of useful resources for gardeners, including recommended books, magazines, organizations, and web sites.

Options dialog box

Use the controls in the Options dialog box to enable or disable sound and to control various display and other program settings.

To open the Options for LandDesigner 3D dialog box, select **Options** under the **Edit** menu.

The Options dialog box is divided into three sections, or tabs.

View tab

Program tab

Design Review tab

View tab

Scene Lighting

Increase the amount of light to brighten the 3D View. Decrease the amount of light to make the 3D View darker.

Choose Quality of Scene

Select one of the options to set the display quality of the 3D View. For details, see **Improve 3D view speed**.

Change 3D Ground

Click this button to change the default ground cover of your landscape design. See **Change backgrounds and ground covers** for instructions.

Change 3D Backdrop

Click this button to change the background setting of your landscape. See **Change backgrounds and ground covers** for instructions.

When I Take a 3D Photo…

There are two options. You may choose to use the depth-of-field blur, which is a camera-like feature. The other option allows you to change the time-of-day shading when rendering a high-resolution graphic.

Display Grid

If you check this box, LandDesigner 3D displays a grid in Top View to help you align objects.

Display Metric Units

Allows you to switch between displaying dimensions in English or metric units. Check the box to display metric units.

Hide Area Fills

Select to print an outline of all of the items in your design. This feature is especially useful when printing in black and white.

Enforce Minimum and Maximum sizes

Some objects have minimum and maximum sizes. You can enforce these limits by putting a check in this box. If you don't select this option, you can resize objects to any size.

Set the 2D Grid Spacing

If you display a grid in Top View, you can vary the grid spacing with this control. Click Default to return to the default spacing (10 feet).

Plant Labels

The Plant Labels option lets you show the full name or plant type (shrub or annual, for example) for each of your plants. In addition, you can select the font, type size, and effects for your plant labels and notes.

Program tab

Growth Rate

Drag the slider bar to indicate how quickly plants typically grow in your area. See **Project Growth Over Time** for details.

Hide Plant Photo Insets in Object Bar

The Object toolbar can display photo insets of plants. When this option is turned off, the program may run faster.

Show All on Shopping List

Most, but not all items in LandDesigner 3D have prices associated with them. Check this box to see prices for all items in your design on the Shopping List that have a price.

Program Sounds

When you select this check box, all sounds play in LandDesigner 3D. When deselected, sounds are turned off. See **Sound options** for details.

Walkthrough Sound

Lets you specify the sound you hear while navigating the 3D View. By default, you hear footsteps. To hear a sound, select it and click Audition. See **Sound options** for details.

Design Review tab

Design Review checks all selected items

This list of options determines the factors that the Design Review considers when examining your design. Clear options to reduce the amount of advice that the design review generates. For instance, if you are not interested in irrigation, clear the "Check for existence of irrigation systems" checkbox.

View Menu

Use View options to switch between 2D and 3D views, zoom in or out, and search for plants and other objects.

2D View
Use to switch to the 2D View of your design. 2D View is an aerial floor plan you use to add plants and other objects.

3D View
Use to switch to the 3D view of your design. 3D View provides a realistic view of your design.

Zoom> Zoom In
Allows you to view your design from a closer vantage point.

Zoom> Zoom Out
Allows you to view your design from farther away.

Zoom> Zoom to Lot Size
Resizes Top View to display the complete lot.

Search Options> Plant Search
Opens the Plant Search window. Use this feature to locate specific plants and add them to Your Object Bar.

Search Options> Object Search
Opens the Object Search window. Use this feature to locate objects and add them to Your Object Bar.

Design Guide menu

Use Design Guide options to get tips and information for designing your landscape.

Contents   View the contents of the Design Guide. Click a topic for information.

Search   Search for a topic of interest in the Design Guide.

Chapters   Go to a selected chapter of the Design Guide.

Help menu

Use this option to access the online help system and view credits, copyrights, and version information.

Contents   View the contents of the online help. Click on a topic for more information on any subject.

Credits   See the list of people who developed LandDesigner 3D.

About   View information about the product.

Version   See the version number of the LandDesigner 3D software.

Toolbar reference

LandDesigner 3D's Designer includes three toolbars:

The Top View toolbar, which helps you control the Designer display.

The Top view tools in the Object toolbar.

The 3D view tools in the Object toolbar.

The Object toolbar of the Designer changes according to which view you're using. To work in the 3D view or the Top view, click the Top tab or the 3D tab in the Top View toolbar.

What do you want to look up?

Top View toolbar

Top view tools in the Object toolbar

Navigation arrows

Top View toolbar

The Top View toolbar helps you control the Designer display. The toolbar contains the following options. To see all these options, you must be in Top view.

3D. Click this tab to change the Designer to 3D view.

Top. Click this tab to change the Designer to Top view.

Zoom Tools. To **zoom** in on a particular area of the design, click the **Zoom In** tool in the Top View toolbar then drag in the Designer to define the rectangular area. The area is magnified when you release the mouse. Click the **Zoom Out** tool to zoom out from a magnified, enlarged view.

> **Note:** To resize Top view to display your entire lot, choose **Zoom to Lot Size** from the **Windows** menu.

> **Visible Layers**. Click this button to view a list that lets you turn the display of foliage, utilities, and other details on or off. For more information on using this feature, see **Use layers**.

> **Add Text.** Use this tool to add notes or descriptions in Top view. When you add a note, a line is automatically included; the line points to the plant or other subject for the note. First, you'll select the end point for the note line; then, you'll select the note's text location. For details on working with text notes, see **Add Text Notes**.

> **Measure**. The Measure tool lets you measure the distance between any two points in the Top view. For details on using the Measure tool, see **Use the measuring tape**.

> **Drag Select**. Use this tool to select multiple plants and objects in Top view. Click the tool, then drag your mouse over the appropriate plants and objects in Top view. Once you've selected the items, you can move, delete, or manipulate all the items at once.

Add Text Notes

You can add comments to your design by typing text notes. Notes can be useful for explaining features of the design to contractors or simply to provide a reminder to yourself.

When you add a note, a line is automatically included; the line points to the plant or other subject for the note. First, you'll select the end point for the note line; then, you'll select the note's text location.

To add a note:

1. **Click the Add Text button in the Top View toolbar.**

2. **In the design, click the "pointer" end of the note line.**

3. **Click the opposite end of the note line.**

The note line is drawn form the "pointer" end to the base of the note line. A text box with the word "Notes" appears at the base. You can change the note's text and appearance.

To change note text and appearance:

1. **Double-click the note's text label. Or, right-click a label, and then click Specs.**

2. **Type new note text.**

3. **Select a font, style, and type size for the note text.**

4. **In the Effects box, select strikeout, underline, or color effects for note text.**

5. **Select Show Arrowhead to place an arrow at the end of the note's "pointer" line.**

6. **Select Draw Border to place a line around the edge of the label.**

7. **Select a background color for the label.**

8. **Click OK to save note settings.**

Object toolbar in Top View

Use the Object toolbar at the bottom of the screen to add plants and other objects to your design. To see this toolbar, click the Top tab in the Top View toolbar.

To use the Object toolbar in Top view:

1. **Click the Category buttons to the right of the Search buttons to select the type of plant or object you want to add.**

   When you click the first button, a list of plant or object categories appears. Choose the category you want. A group of related items appears in the Object toolbar. A brief description of the item usually appears when you hold your cursor over it in the Object toolbar.

   Note that the Category buttons are hierarchical. In other words, your choice in the first button determines the options that appear in the following buttons.

2. **When you find the item you want to include, click its icon and drag it into Top view.**

3. **Look through all the categories to get familiar with the organization. If you don't see what you want, search for your plant or object by clicking the Search Plants or Search Objects button.**

   For details on using the **Search Plants** button, see **Use the Plant Search window**.

   For details on using the **Search Objects** button, see **Search for objects**.

Object toolbar in 3D

Use this toolbar at the bottom of the screen to control the 3D view and move around in it. To see the toolbar, click the 3D tab in the Top View toolbar.

The Object toolbar in 3D gives you the following Navigation tool options:
View. Click the two View icons to switch between an overhead view (helicopter icon) or an eye-level view.
Move. Click a Move arrow to move in the direction indicated by the arrow. Hold down the mouse to continue the movement.

Height. To adjust viewing height, click the up and down arrows.

Tilt. Click the Tilt icons to adjust your viewing angle.

Note: The tools listed above are also available when the 3D view is selected in the Mini View.

Spec Sheets

LandDesigner 3D allows you to assign dimensions, colors, and textures to selected plants and objects using *Spec Sheets*. When you **double-click** on an object, its Spec Sheet opens, revealing properties of the item that you can change.

What do you want to do?

Use Mini View Spec Sheets

Use Spec Sheets

Use Mini View Spec Sheets

If you click the Mini View tab, a partial version of the Spec Sheet appears in the Mini View on the left side of the window. You can see the plant or object's name and revise its width, height, depth, or length. To open the Spec Sheet from this partial version, click Details.

You will notice slightly different options in Mini spec sheets for objects, plants, sprinklers, and house blocks. For example, the Mini spec sheet in the following illustration has a **Replace With** button that lets you replace the selected object with another similar object.

Use Spec Sheets

Use Spec Sheets to edit properties of an individual furnishing or object, including size, materials, color, style, and price.

To open an object's Spec Sheet, double-click the object. You can also select it and click the Details button in the Mini View.

Most Spec Sheets are divided into at least five categories of information, called tabs:

Basics tab. Includes dimensions and materials.   Plants and some objects do not have materials. You can also change to a different object or plant using the Replace With button.

Preview tab. Displays the selected object from all angles in 3D. This tab is not available for plants.

Personal Notes tab. Lets you enter notes about an object.

Info tab. Provides access to more information on the object.

Price tab. Provides pricing information.

Basics tab

The Basics tab displays the plant or object's name, current dimensions, and other properties. Edit these settings to revise the selected plant or object.

Replace With. This control works differently for objects and plants. To replace an object with something similar, click the **Replace With** button. A series of related objects appears. For example, you may have first placed a hammock in Top view, but you might want to change it to a bench. Scroll through the Replace With window, click on the new object you want, and click **OK** to make the change and return to the Spec Sheet.

If you are working in a plant's Spec Sheet and you click the **Replace With** button, the Plant Search window appears. For details on this feature, see **Use the Plant Search window**.

Size and Location. These controls are the best way to precisely control the size and elevation of plants or objects. You can change the plant or object's Width, Depth, Height, and Height Above Ground by entering new dimensions in these fields.

Original Size. To return to the plant or object's original size, click the Original Size button.

Lock Size. Once you decide on your plant or object's dimensions, check Lock Size. When locked, a plant or object cannot be accidentally resized in Top view, and you cannot edit the Width, Depth, and Height settings.

Lock Size & Location. Check this box if you want the plant or object's size and position to remain the same. When the plant or object's size and location are locked, you cannot edit the other settings under Size and Location.

Materials. The panels in the Materials section represent all the colors and textures you can change for the selected object. An object can have one or more panels. Each panel shows a picture of the material and the name of the region where the material is applied. For a quick description of a material, hold the mouse pointer over a panel.

Note: Plants and some objects do not have material options in their Spec Sheets.

To change a material, click on its panel. The Choose Materials window opens. You can choose from hundreds of materials for the selected object. For details, see **Add colors and textures**. After you choose a new material, click **OK** to return to the Basics tab of the Spec Sheet. The panel will show your change.

To copy the material shown in one panel of the Spec Sheet to another panel, simply click the first panel, drag the mouse over the panel you want to change, and release the mouse.

Lock Materials. When you are satisfied with the chosen materials, you can check this box to prevent the materials from being changed by settings you make later in the Spec Sheet. Click again on the box to cancel the lock.

Additional Options for Plants. Some plants have additional options that appear on the right side of the Spec Sheet. For example, you can assign a plant a different flower color. To display the plant by its size at a certain age, enter an age and then click Size Based on Age. The plant's height and width will change, but the amount of its branches and foliage will not.

For details on using the Change Custom Info option, see **Add your own plant records**.

For general information on using Spec Sheets, see:

[Revising a plant using its Spec Sheet](#)

[Use an object's Spec Sheet](#)

Preview tab

Click the **Preview** tab to preview the selected object from all angles in 3D before leaving the Spec Sheet. You can drag your mouse across the object to rotate it, click the **Spin** check box to rotate it automatically, or click the **Top** button to look down at the object.

Note: The Preview tab is not available for plants, and is not available for all objects.

Personal Notes tab

Use this tab to enter your own comments about the object. These comments will be saved with your design. If you want to clear the notes and start again, click **Clear Notes**.

Price tab

LandDesigner 3D provides low, medium, and high prices for many objects, based on installed, retail prices. Choose one of these prices or click the **Yours** option and type a price of your own.

Even if the object has not been assigned a price, you can assign one yourself.

Add to the Shopping List. If you check this box, the price you select or enter in the Price tab appears in the Shopping List of LandDesigner 3D. For details, see **Use the Shopping List**.

Improve performance

You might find the following tips helpful when using LandDesigner 3D:

Hardware acceleration

Improve 3D view speed

Turn off layers

Recommended Video Display

Improve 3D View speed

Sierra LandDesigner 3D creates a three-dimensional effect on a 2D screen using a process known as **rendering**.   Rendering uses the positions and shapes of all the objects in the view to draw the image as it would be seen if you were standing there.

Rendering is a tradeoff between viewing quality and the speed with which Sierra LandDesigner creates the 3D image. The more detail you choose to draw in the image, the longer it takes.   If you want to speed up the drawing, you must sacrifice 3D image quality.

During the basic design phase of your home, you might want to increase the drawing speed at the expense of image quality. You can then navigate through the 3D view more quickly and smoothly, since Sierra LandDesigner 3D will require less time to generate the 3D scene. Later, when you want to see all the materials and colors you've assigned, you can switch back to a better image quality and longer drawing time.

To get the highest quality images, you can make high-resolution images using a sophisticated form of rendering called **raytracing**.

To control drawing speed and image quality:

1. **Select Options from the Edit menu.**

2. **Click the View tab in the Options dialog box.**

3. **To change the drawing method, click one of the following options under Choose Quality of Scene:**

    Full light, all materials. Select this setting to see the highest-quality image, but at the slowest drawing speed. This setting is good for viewing your finished design.

    Minimal light, all materials. This intermediate setting is a compromise between drawing speed and image quality.

    Full light, no materials. Select this setting to increase the drawing speed but decrease 3D image quality.

    Note: You can also increase drawing speed by clicking the **Draft Mode** check box, which appears in the Mini View when you select the **Design** phase in the Step-by-step toolbar and then select Dynamic F/X.

Turn off layers

You might notice a decline in your computer's performance as your design becomes more complex. The **Visible Layers** button in the Top View toolbar lets you turn off the display of many items in your design. For example, you might improve processing speed by turning off the display of plant foliage.

For more details on the Visible Layers options, see **Use layers**.

Solve memory problems

Because of LandDesigner 3D's rendering capabilities and other advanced features, the program might require more memory than some computers can provide. If your processor runs short of memory, you may notice these symptoms:

Parts of LandDesigner 3D do not start or display.

The display shows an inappropriate color scheme.

Printouts appear as if created on a typewriter.

LandDesigner 3D stops responding to keyboard or mouse commands.

If you encounter such difficulties, try the following techniques to help you overcome memory shortfalls:

Close other applications while running LandDesigner 3D. Note that some programs may start automatically when you start Windows. You'll find these program icons in your Windows Startup group.

Reboot your computer.

Increase the amount of random access memory (RAM) in your system.

Glossary

Use the glossary for quick explanations of important terms in LandDesigner 3D.

Camera

The camera controls your view in 3D. The camera tool is the red icon that appears in Top view. Point the camera toward an area you want to see in 3D view. For details, see **Move the camera**.

Designer

The main screen you use to complete your landscape design in LandDesigner 3D. The Designer has a *Top* view, which is an aerial-view layout you use to add plants and other objects, and a *3D* view, which provides a realistic view of your design.

Dragging

Dragging refers to holding down the mouse button while you move the mouse pointer across the screen.

Hardscape

This is the underlying structure of your yard, such as a fence or railings.

Masking

Get rid of the background surrounding your custom object by covering it up or erasing it completely using our masking tool.

Object toolbar

These controls at the bottom of the Designer display objects and plants in Top view, and navigational tools in 3D view.

Panels

Panels are the squares shown in the Materials section of object Spec Sheets. Panels show a small picture of the material assigned to an object. Hold your mouse over a panel to see a quick description of the material. Plants do not have materials in their Spec Sheets.

Rendering

Rendering refers to the way LandDesigner 3D draws a three-dimensional effect on a 2D screen.

Rotating

Each selected plant or object has a spin **handle**. To rotate a plant or object in Top view, click its spin handle and drag it in the direction you want to rotate it.

Search

The Plant Search and Object Search windows give you access to LandDesigner 3D's extensive database. Use this feature to locate plants and objects or to replace generic "placeholder" plants.

Shopping List

A feature in LandDesigner 3D that keeps track of selected design elements, as well as their quantities, installed prices, unit prices, and subtotals. For details, see **Use the Shopping List**.

Spec Sheets

Spec Sheets are windows for editing properties of a selected plant or object, including its size, assigned materials, color, style, and price. To view the Spec Sheet of a plant or object, **double-click** it.

3D View

3D view is a realistic representation of your landscape design. The red camera in the Top view controls what you see in 3D. You can navigate the 3D view using the mouse, the arrow keys on your keyboard, or the navigational arrows at the bottom of the screen.

Top View

The window in LandDesigner 3D where you add, arrange, and revise plants and other objects. The Top view displays your design from an aerial perspective.

Wizard

A series of windows that helps you build a component of your landscape. LandDesigner 3D includes wizards to help you design lots, houses, slopes, gardens, and irrigation.

Recommended video display

This program requires a video card and driver that supports at least 16-bits of colors to run.

We recommend a screen display resolution of at least 800x600, and there are benefits to 1024x768 as well.

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3D Models

Some provided by Viewpoint DataLabs International Inc.

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Crystal Harwood	Associate Designer
David Elliott	Lead Engineer
Karen Redetzki	Brand Manager
Stacy Heinemann	Associate Brand Manager
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Jodie Henry	Artist
Michelle Daniels	Documentation Manager
Media Publishers	Technical Writer and On-Line Help Author

Lawrence Lee

Ernie Wasson

3D Models

Some 3D models provided by

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625 South State Street, Orem, Utah, 84058

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Tips and tricks

Use layers

The Visible Layers control in Top view lets you show or hide various aspects of your landscape design. You might want to turn off the display of some items if your computer is running slowly or your design becomes congested. Turning off the foliage layer has the greatest effect on speed of processing.

Select small objects below larger ones

If you need help selecting smaller objects when they are positioned below larger ones, **right-click** on the larger object. Choose **Select Object** from the resulting menu and then select the smaller object's name from the next pop-up menu.

Save the decorations for last

As a rule, don't add decorations until after the major objects are in place and the right size. You can thus experiment freely without having to reposition every small object.

Using vertical and horizontal snap

When you're dragging an object or the **handle** of an object, hold down the **Shift** or **Ctrl** key while dragging. This constrains or "snaps" the movement to a straight line.

Improve printing quality

If you're printing designs on a black and white printer, the filled-in areas of your design may all print black, making it hard to distinguish separate areas. From the **Edit** menu, choose **Options** to see the Options dialog box. Choose the **View** tab and then choose **Hide Area Fills** to print only outlines of the filled-in areas of your landscape.

Improve 3D view speed

Rendering refers to the way LandDesigner 3D draws a three-dimensional effect on a 2D screen. Rendering requires a tradeoff between viewing quality and the speed with which LandDesigner 3D creates the 3D image.

During the basic design phase of your landscape, you might want to increase the drawing speed at the expense of image quality. You can then navigate through the 3D view more quickly, since LandDesigner 3D will require less time to draw the 3D scene.

Later, when you want to see all the materials and colors you've assigned, you can switch back to a better image quality and longer drawing time.

To control drawing speed and image quality:

1. **Select Options from the Edit menu.**
2. **Click the View tab in the Options dialog box.**
3. **To change the drawing method, click one of the following Quality of Scene options:**

   Full light, all materials. Select this setting to see the highest-quality image, but at the slowest drawing speed. This setting is good for viewing your finished design.

   Minimal light, all materials. This intermediate setting is a compromise between drawing speed and image quality.

   Full light, no materials. Select this setting to increase LandDesigner 3D's drawing speed but decrease 3D image quality.

Note: You can also increase drawing speed by clicking the Draft Mode check box, which appears in the Mini View when you select the **Design** phase in the Step-by-step toolbar and then select **Dynamic F/X**.

Improve speed when working with the Object toolbar

The Object toolbar can show photo insets on the icons of specific plants. You can improve speed by choosing **Options** from the **Edit** menu to see the Options dialog box. Choose the **Program** tab and then choose **Hide plant photo insets in Object bar** to hide these photo insets.

Solve memory problems

Because of LandDesigner 3D's rendering capabilities and other advanced features, the program might require more memory than some computers can provide. See **Solve memory problems** for tips on conserving your memory resources.

Mixing curves and lines in a shape

You can change a portion of a curve to a line (or vice versa) by right clicking on the diamond shaped pull handles and choosing *Change curve/line* from the popup menu.   By default the draw tools create shapes that contain only curves or only straight lines.

Having more control over curves

By adding extra "points" to a curve, you will gain more control and flexibility while reshaping.   Right click on a diamond shaped handle and choose *Split (add a point)* from the popup menu.   This is especially useful for a curve that is between two line segments.

Lock the size and location of large ground objects like lawns and beds

To select and move small objects on top of a larger object without inadvertently moving the large object, **double-click** on the large object and click the *Lock Size & Location* checkbox (on the Basics tab under the 'Height Above Ground' field).

Copying materials in the Spec Sheet

It can be tedious to select the same material for multiple areas for the same object.   To copy the material shown in one panel of the Spec Sheet to another panel, simply click the first panel, drag the mouse to the panel you want to change, and release the mouse.

Learn irrigation basics

Not only will you save water with the right system, you'll save time. Providing enough water, regularly, is one of the easiest ways to help your plants thrive. Don't wait until your yard is fully planted to plan the whole system. See *Using an underground sprinkler system* and *Choosing drip irrigation* in Chapter 3 of the Design Guide for more information.

Sprinklers

Your first goal in the design process is to position sprinkler heads for overlapping or head-to-head coverage. Each spot of ground should be covered by the throw of at least two sprinklers. For full coverage in a rectangular area, first place quarter-circle heads in the corners. Then place half-circle heads midway along each side. If necessary, set one or more full circle heads along the centerline of the area's length.

To design your sprinkler system with LandDesigner 3D, start by taking a sprinkler from the Object toolbar and placing it in the Top view. Use the wide variety of sprays and types of sprinklers to make sure that your basic irrigation plan covers your entire landscape. You can then resize them in the Top view or **double-click** the sprinkler to use the Spec Sheet.

Pipes

After setting sprinklers, divide the system into pipe circuits. You'll probably need ¾ inch and ½ inch PVC pipe for most circuits unless you have a large yard.   Be sure to have an experienced irrigation installer check your piping plan before you shop. These are the principle rules:

§   Don't put plants with different watering needs - lawns and shrubs, for instance - on the same circuit.

§   The combined flow of all the heads on a single circuit should not equal more than 75% of the total flow rate available.

§   All the heads on a circuit must be of the same type. For instance, don't mix spray heads with single-stream heads.

§   After adding sprinklers, follow these steps to add the pipes that will supply water to your sprinklers. On the Object toolbar, you have a choice of valves, drains and water pipes.

Planning Drip

Drip tubing is often laid above ground, though it may be buried or mulched. Use buried ¾-inch PVC pipe to supply the circuits and ½-inch drip tubing above ground, further branching with ¼-inch tubing up to 15 feet long. You can use individual emitters or laser-cut ¼-inch tubing that drips along its entire length.

If you prefer to use a drip irrigation system, choose from irrigation tubing, several types of drips or a bubbler in the Object toolbar.

Review your design

LandDesigner 3D assists you with finding common problems in your design. If you plant a tree too close to the house or if you planted sun-loving plants in the shade, the review will find the problem.

To use the Design Review:

1. **Click the Design Review button on the Finish tab.**

    Sierra LandDesigner 3D will automatically examine your design.

2. **Click the Problems tab to view the list of problems associated with your design.**

    When you click on a problem in the list, the objects that problem refers to will appear in the Top view highlighted in red.   You can turn off the highlighting by clicking the Hide Pointers button.

3. **Adjust your design to eliminate the problem.**

    As you review the problems, you can make changes to the design to correct the problems.   For instance, you may move a sun loving plant from the shade into a sunny area.

4. **Click the Review All button to refresh your problem list.**

Note: The Design Review can look for several categories of problems. Customize the types of problems the Design Review looks for by using the Options dialog box in the Edit menu. For more information, read the **Design Review tab**.

Import a deck from SierraHome's 3D Deck

You might want to incorporate a deck you've created in Sierra Home's 3D Deck into your landscape design.

To export a deck from 3D Deck:

1. **In 3D Deck, save a current version of the file that you wish to export.**

    Sierra recommends saving to the Sierra\3Ddeck folder.

2. **Select File/Export Deck Design.**

3. **Enter a name for the file in the Deck Name field.**

4. **Click OK to export the file.**

    The deck will automatically be exported into a location where LandDesigner 3D will find it.

5. **Exit the deck design window, and then close the deck program. Then, remove LandDesigner CD 2 and insert CD 1.**

To view an imported deck in LandDesigner 3D:

1. **Open LandDesigner 3D, and then open the design file to which you want to add your design.**

2. **Select the Design tab. Using the Categories buttons at the bottom of the screen, select House, and then select Decks.**

3. **Move your mouse cursor over the thumbnail images to find the deck labeled "Imported Deck."**

    The deck thumbnail image is of a generic rectangular deck, with a small disk icon above it.   When dropped into place the deck will have the design you gave it in 3D Deck.

4. **Drag the deck onto your design in Top view. Or, click the icon and then click on your layout.**

5. **Click the name of the deck you wish to import, and then click OK.**

    The deck will be placed into the LandDesigner 3D design.   You can move and rotate the deck but you cannot modify the deck's materials and style.   To change the deck you must return to 3D Deck, edit it and then export it again.

High-resolution images using raytracing

Raytracing is a sophisticated form of **rendering** that is used to display the view in very high detail, with realistic lighting effects, such as shadows, highlights, contrast variations and reflections.   Many of the amazing visual effects used in Hollywood movies use this technique.   You can use the high-resolution raytracing feature of Sierra LandDesigner 3D to create very detailed, realistic pictures of your designs.

Raytracing is a computationally intensive task and can take from several minutes to several hours to complete a single image.   Use Snapshots when you want to be able to return to the same vantage point repeatedly.   Use high-resolution raytracing any time you want a high-quality image for your own use or to share with others.

To make a high-resolution photo:

1. **Use the 3D view controls to show the area you want to record in the photo.**

2. **Select Render from the Features menu.**

   You can make a rendering of the current view, or of a previously saved Snapshot.

3. **Select Render this View.**

   The Render a 3D Image dialog box appears.

4. **Select the Date and Time for the image.**

   LandDesigner 3D adjusts the lighting to match the time and date you specify.

5. **Select the type of camera lights you would like to use.**

   This option affects the apparent light used in the image.   Each choice has a different effect on the contrast in the image and the appearance of highlights and shadows.   *Available Light* corresponds to taking a picture using ambient light without a flash.   *Single Soft Fill* is similar to a built in flash on a camera. *Single Hard Fill* is like a brighter built in flash.   *Multi Soft Fill* is similar to a soft light on either side of the camera.   *Multi Hard Fill* is like two brighter lights on either side of the camera.

6. **Select the size for your image.**

   The 160 x 120 pixel size is the smallest image, but is also the quickest to render.   A 1024 x 768 pixel image is the largest size and takes longest to render.   Raytracing can take a long time, especially for large images.   Be prepared to go get a cup of coffee if you pick a large image size. If you choose the Custom option, you can specify your own image size in pixels.   Generally, it is best to make a small image first to make sure you are at the vantage point you really want.

7. **Select Anti-alias to sharpen object edges within the image.**

   Selecting this option greatly increases the time required to generate the image.

8. **Click Start to begin taking your photo.**

   After you click the start button, you'll see the rendering start to occur in the window on the right. A progress bar and a Percent Complete display show how much of the view has been rendered.

9. **While you wait, you can switch back to LandDesigner and continue working.**

   Click the Minimize button in the title bar, or switch to another program. The rendering continues in the background. When it is complete, the window opens again to display the results.

10. **Save the image by clicking the Save button.**

    Your file will be saved as a *.bmp* file in the C:\Sierra\Land3D\Designs directory.

You can also make high-resolution renderings of one or more Snapshots you have made.

To make a High-Resolution 3D Photo of a Snapshot:

1. **Take a Snapshot(s) of your design.**

    For more information see [Take Snapshots](#).

2. **Select Render from the Features menu, and then select Render Recorded Snapshots.**

3. **Click the Add button to add Snapshots to the list of Files to Render on the right.**

4. **Specify the time of day and season for each photo.**

    Click on the Snapshot that you want to modify in the list on the right. When it is selected, you will be able to select the date and time to simulate in the image, and the Rendered Image Size.   You can also change the file and path if you want.

5. **Click Start to begin.**

    Unlike rendering a single image, when rendering snapshots, you will not be able to switch to LandDesigner 3D and let the rendering occur in the background.

To view or print your photos, use an application such as Microsoft Paint.

Create your own objects

In some cases, you might want to add your own objects to the design. LandDesigner 3D lets you use pictures of your own objects to create 2D custom objects. 2D custom objects are like cardboard stand-ups that always face you. As you move around them, they turn to face you.

If you are creating an object from a photo, you'll need to convert your photographic image into a bitmap (.BMP)or JPEG (.JPG) file. Your scanner software should tell you how to do that.

To create a custom 2D object:

1. **Select Add your own Objects from the Features menu.**

   The Custom Object screen appears.

2. **Click the Browse button in the Image box to open the Open file dialog.**

   Find your bitmap file and click Open. This loads your picture into the Image box on the left.

3. **Define a mask.**

   A mask is used to hide parts of the picture that you don't want to see in your object. For instance, if you have a picture of your cat on your porch, you will only want your object to contain the cat, not the porch. So you need a mask that hides the porch.

   If you already have a mask defined, you can open it by clicking the Browse button in the Image Mask box. Otherwise, click the Create button to open the Mask Maker.

   In the Mask Maker use the following tools to mask out the unwanted areas:

   Bucket. Use the bucket to mask out large areas of a similar color, like a sky. Set the tolerance level with a number between 1-100. A lower number selects less pixels because the colors must be more similar. A higher number selects more pixels and also runs the risk of selecting your image as well. A tolerance level of 15 is good for sky.

   Block. Use the block tool to select larger areas of pixels away from the image border.

   Pen. The pen tool has a fine point and is useful for masking near the edge of the image. Select a pen size to customize the size of the pen point.

   Use the **Zoom In** and **Zoom Out** tools to assist you in viewing your work.

   Click OK to save your mask and return to the Create a Custom Object window.

4. **Enter the dimensions for your object.**

5. **Choose between horizontal and vertical orientation.**

6. **Give your object a name.**

7. **You can rename or remove custom objects by clicking the appropriate buttons.**

8. **Click Add to add it to the list of custom objects.**

9. **Click Close to return to the Design window.**

Note: To create a plant with more realistic 3D shape, see **Add your own plant records.**

Create custom materials

If you'd like to customize your design, you may import graphics in Windows bitmap (*.bmp*) format to use as materials in your design. For instance, you might want to change the appearance of the house to match your own house.   If LandDesigner 3D does not have a suitable wall material, you can create your own.

There are two ways to do this.   If you have a bitmapped picture of the material, you can use **Add your own Materials** from the **Features** menu to turn it into a material.   You can also start with one of several material templates and color them to your satisfaction using the Material Painter on the **Features** menu.

After you have created the new material it will appear in **Custom Materials** under the **My Materials** folder in any object's Materials Spec Sheet.

To create a custom material:

1. **Select Add your own Materials from the Features menu.**

   The **Custom Materials** window appears.

2. **Click the Browse button to browse for a photo to import.**

   The best size for a bitmapped image is 128x128 pixels. Most graphics software that comes with digital cameras or scanners will allow you to edit the image to be this size.

3. **In the window on the right side of the screen you can view your image as a repeating pattern.**

4. **If you're satisfied with your results, enter a name for your new material and click Add.**

   This will add your material to the list of custom materials. This material will now be available from Spec Sheets that allow you to change materials.   To change to a custom material from a Spec Sheet, double-click on the current material shown in the Spec Sheet.   Your custom materials are available in Custom Materials under the My Materials folder.

5. **You can rename or remove custom materials by clicking the appropriate buttons.**

6. **Click Close to return to the design window.**

To paint your own materials:

1. **Select Material Painter from the Features menu.**

   A menu of available materials appears.

2. **Select the type of material by clicking one of the tabs at the top.**

   These materials include Masonry, Tile and general Patterns.   Choose your material from the swatch and click the Next button.   The Material Painter screen appears.

3. **Click on a color to edit.**

   A color menu appears.

4. **Select a sample from the basic colors or color spectrum.**

   To create a new custom color, click within the color spectrum until you achieve the correct hue in the color square just beneath it. Then, click the Add to Custom Colors button. The color is added to the selection on the left.

5. **Click OK.**

6. **Type a new name for the material, and click Finish.**

   This will add your material to the list of custom materials. This material will now be available from

Spec Sheets that allow you to change materials. To change to your own material from a Spec Sheet, double-click on the current material shown in the Spec Sheet. Your custom materials are available in Custom Materials under the My Materials folder.

Refining your design

This section describes the features that let you refine your design in LandDesigner 3D.

What do you want to do?

Use the Shadow Caster

Project Seasonal Change

Project Growth Over Time

Learn irrigation basics

Review your design

Change backgrounds and ground covers

Import your own background

Info tab

This tab displays general information about the selected item. The name and appearance of the tab depend on the selected plant or object.

Hardware acceleration

You can determine if the program is taking advantage of hardware acceleration by choosing **Options** from the **Edit** menu and making sure that "Use 3D Hardware Acceleration if available" is selected on the View tab. To turn off hardware acceleration, deselect the option and restart the program.

System Requirements

To work with Sierra LandDesigner 3D, you need the following items:

§ An IBM® PC or compatible PC with at least a Pentium 166MHz processor. For better results, we recommend a Pentium 233 MHz processor. The faster your processor, the faster Sierra LandDesigner 3D will run, especially in 3D View.

§ Microsoft Windows® 95/98/NT/2000/Windows ME.

§ At least 32 MB of RAM. (At least 64 MB is recommended.)

§ Complete LandDesigner 3D: At least 100 MB of available hard drive space for full installation; 60 MB is the maximum size for any single program. (At least 125 MB is recommended.)

§ Custom LandDesigner 3D: At least 90 MB of available hard drive space for full installation; 60 MB is the maximum size for any single program. (At least 115 MB is recommended.)

§ SVGA color monitor and graphics card capable of displaying 16-bit graphics.   The program works at a screen resolution of 800 X 600 pixels, but we strongly recommend a resolution of at least 1024 X 768.   For best results, we recommend a Direct 3D-compatible accelerator card.

§ 8X CD-ROM drive. (16X drive recommended.)

§ Windows-compatible sound card (optional, but recommended).   Sierra LandDesigner 3D includes music, narration, and sound effects that require a sound card to hear.   If you do not hear sound as you enter Windows, then you probably do not have a sound card.   For the best sound, we recommend a 16-bit stereo sound card.

§ An Internet connection (optional, but recommended).

You should also be comfortable with the basic skills for working with Microsoft Windows.   If you are not familiar with windows, icons, scroll bars, and other basic tools, spend some time with Windows before tackling Sierra LandDesigner 3D.

Aside from basic Windows skills, you might also need to know how to connect your computer to the Internet.   If you use other Internet software such as a Web browser, you are familiar with the connection process.   If you don't, consult the documentation for your network software.

Opening Screen

Rendering

Rendering refers to the way Sierra LandDesigner 3D creates a three-dimensional effect on a 2D screen. Rendering requires a tradeoff between image quality and the speed with which Sierra LandDesigner 3D draws the 3D image.

Step-by-step toolbar

The Step-by-step toolbar helps you proceed logically through the design process. The buttons that appear below the selected tab control the features that are available in other parts of the window.   For instance, when the Design tab is selected, the Object toolbar appears if you have certain buttons selected, such as Plants or Garden, but the Object toolbar will not be available if you have the Dynamic F/X button selected.

Guide tab

If you need help using any of the design steps in the Step-by-step toolbar, click the Guide tab. For narrated video explanations, click the Tutorial button on the Guide tab.

Top View

The Top view is an aerial, 2D look at your landscape design. Use the Top view to create your design and add plants and other objects. This view appears by default when you open the Designer.

3D View

The 3D view shows the design in three dimensions. To switch to 3D view from Top view, click the **3D** tab in the Top View toolbar. Use the Navigation tools of LandDesigner 3D to stroll around in your design and view it from any angle.

Menu bar

The menu bar contains commands for using LandDesigner 3D.

Top View toolbar

This toolbar lets you switch between 3D view and Top view, and includes several controls for changing the Top view display. For example, you can magnify your view, view or hide certain objects, add text notes to your design, and measure distances.

Mini View

When you click the **Mini View** tab, this window in the upper left corner shows a smaller version of the active view. In other words, if the Top view appears in the Designer, a smaller version of the 3D view appears in the Mini View.

Note: The Mini View is not always available.

Object toolbar

This toolbar changes depending on whether 3D view or Top view is selected. This image shows the toolbar in Top view. The Object toolbar is used to select objects from the extensive database of plants and objects in LandDesigner 3D.

You will only see this toolbar if you are in the correct portion of the design phase. The options available in the toolbar depend on the current settings in the Step-by-step toolbar.

Add objects to your design by dragging them from the toolbar onto the Top view.

Object toolbar

The Search Plants button on the Object toolbar opens the Plant Finder window.

Object toolbar

The Search Objects button on the Object toolbar opens the Object Finder window.

Object toolbar

The Draw Type button on the Object toolbar is used to select a drawing tool.   When you add certain types of objects or plants to the design, this button will present you with several different drawing tools that you can use to define the object.

Object toolbar

These Category buttons in the Object toolbar are used to select objects.   Objects are grouped into a hierarchy, and all objects can be found by selecting the correct options from the button menus.

The first button gives a list of the major groups.   The middle button gives a list of subcategories of the selected top button item.   The last button, if available, gives subcategories of the selected middle button item.

If you cannot find the object you want through the Category buttons, use the Search Object or Search Plants button at left.

Resources

The Resources option connects you to the World Wide Web directly and securely from LandDesigner 3D where you can get gardening help, problem-solving information or to shop conveniently online. Select Resources from the Features menu.

For more details, see **Connecting to the Web**.

Design Guide

For quick landscaping tips and design information, use the Design Guide.   The Design Guide also contains handy estimators.   For instance, if you are working with concrete and have a material cost, you can estimate the total materials needed and their cost.

Start

This phase welcomes you to LandDesigner 3D by offering three introductory videos and interviews you about your garden.

Site

This phase helps you lay out your yard, including the lot, a representation of your house, the slope of your lot, and roads and driveways. You can also insert symbols to indicate problem areas and points of interest.

Design

This phase helps you through the main part of your design work. Add hardscape, structures, plants, beds, and irrigation. You can also use the Dynamic F/X (effects) to see how shadows affect your plan and how your plants will grow over time.

Finish

Within this phase you can print your design, view the list of materials in it, and see a reading list for learning more about landscape design.

Zoom tools

To zoom in on a particular area of the design, click the **Zoom In** tool in the Top View toolbar, then drag in the Designer to define the rectangular area. The area is magnified when you release the mouse.

Click the **Zoom Out** tool on the right to see a larger portion of your design.

Zoom In menu command: To magnify your view of the entire design, select **Zoom In** from the Windows menu.   This will change the scale so that all of the objects in your design are visible.

Create a Custom Material
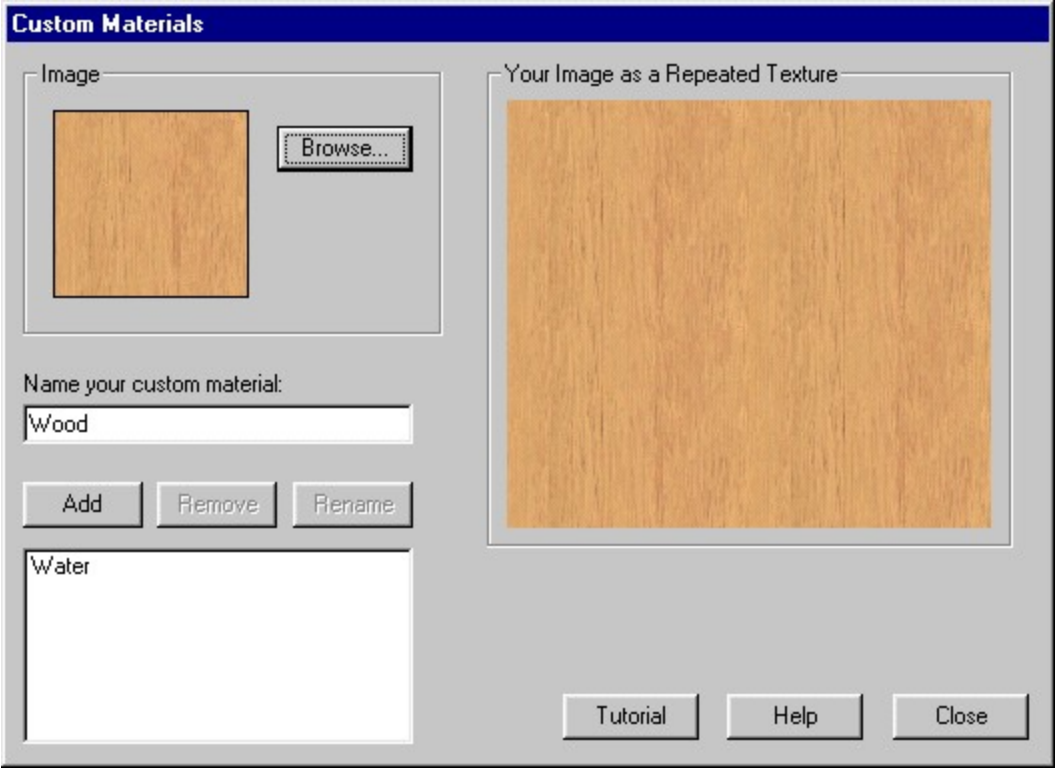
Handles

Handles are tools on an object that are dragged with the mouse to change the object.

When you want to change an object with the mouse, you must first select it.   When it is selected, various markers will appear on the box that is drawn around it.   These include squares, diamonds and dots.   As you move the mouse over these markers, the mouse icon will change into various handles depending on what part of the object the mouse is over, and what type of object it is.   When you are over the right kind of handle, click and drag the handle to change the object.

USDA Hardiness Zones

Sound

LandDesigner 3D includes music, narration and sound effects. To hear these, you'll need a Windows®-compatible sound card. If you don't hear sound as you enter Windows, then you may not have Windows® sound.

Add Text tool

The Add Text tool is used to add notes to the design.   See Add Text Notes.

Tape Measure tool

The Tape Measure tool is used to measure distances on your design.   See Use the measuring tape.

Drag Select tool

To select multiple objects in a region, use this tool.   Click it and then move the mouse to the Top view window and drag the mouse to define a rectangular region.   When you let go of the mouse button, all the objects in the region will be selected.

Visible Layers button

Visible Layers ▶

The Visible Layers button is used to hide layers in the Top view.   Layers are groups or types of objects and include *Foliage*, *Slope Detail*, *Utilities*, *Sprinkler Coverage*, *Plant Labels* and *Your Notes*.   You might want to hide some layers to reduce clutter in a large design or to reduce the time it takes to draw the design.