



Nova Development

HGTV Home Design for Mac

User's Manual

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INTRODUCING HGTV HOME DESIGN

Welcome to HGTV® Home Design® for Mac®. With HGTV Home Design you can use your Macintosh® computer to design the interior of a house, an apartment or other interior space.

This chapter gives an overview of HGTV Home Design features and covers basic introductory information including how to get help if you need it.

Chapter 1 at a glance:

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Introduction

HGTV Home Design is an innovative home design program that is easy enough to use for beginners, and full-featured enough for more professional interior designers.

You can design:

- Complete buildings: develop entire homes, apartments and offices.
- Room makeovers: change paint, fabrics and flooring for living rooms, dining rooms, kitchens and so forth.
- Remodeling projects: plan room additions and structural changes to an existing building.

Creating a project is as easy as drawing a room, dragging objects into the space and specifying materials for those objects. HGTV Home Design provides models of furniture and accessories, and you can add your own 3D models or models from the Web (such as from Google® 3D Warehouse) as needed.

HGTV Home Design Features

With HGTV Home Design you can design the interior of your future home or office and determine the best location for your furniture and other elements. Before ordering various pieces of furniture, you can see how they fit in the interior space and walk through the space in the 3D view.

Each project contains:

- A printable floor plan of the structure with walls, doors, windows, furniture and other accessories.
- 3D model to view the structure as if you were inside it. You can take “photographs” (screenshots) of the view or ‘walk’ inside a structure.

Setting up the Walls

Drawing walls is as easy as clicking a button and dragging the mouse. You create a 2D floor plan to specify the space for your project. Smart

guides make it easy to set up a room in minutes. To learn how to work with the 2D view, see *Chapter 4: Using HGTV Home Design*. For general information about the various objects in HGTV Home Design, including walls, see *Chapter 5: Working with Objects*. For information about creating walls to define space, see *Chapter 6: Adding Walls, Ceilings and Floors*.

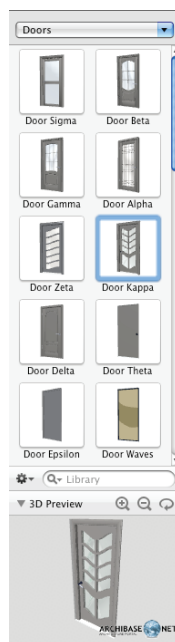
Customizing the Structure

Once you have the walls in place, you can add doors, windows, stairs and other structural elements as needed. All these elements are available from the Building Elements library. After you find the object you want in your floor plan and drag it into place.

See *Chapter 7: Adding Windows, Doors and Structural Elements* for detailed information.

If you're designing an entire building, you can add a roof to the project. HGTV Home Design has a *Roofing Assistant* dialog box for you to select a roof from standard templates. The application automatically fits the roof to the structure, but you can customize the roof as needed. For more information, see *Chapter 9: Working with Roofs*.

You can add an additional storey and, possibly a loft, to the structure and view each storey. For information, see *Chapter 10: Working with Storeys*.



Adding Furnishings

When the structure is in place, you can add furniture, appliances, electronics, decorative elements, lamps and other items. HGTV Home Design provides a vast array of interior objects in the Furnishing library. You can search the Web for more models or develop your own and import them into your projects.

As with the structural elements, you just need to locate the object you want and drag it into your floor plan. For more information, see *Chapter 8: Adding and Adjusting Furniture*.

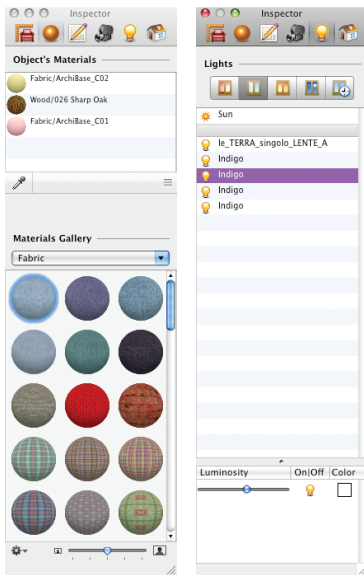
Feel free to re-arrange anything in the project. You can quickly switch between the 2D view and the 3D view to get a realistic feel for the design. In the 3D view you can ‘walk’ or ‘fly through’ the scene. To learn how to work with the different views, see *Chapter 4: Using HGTV Home Design*.



Applying Materials and Lighting

With the structure and interior elements in place, you can get really creative by applying materials such as flooring, wall coverings, fabrics, paint to the various elements. HGTV Home Design provides a built-in materials library, but you're not limited by this. You can import your own materials from image files to apply to objects. For example, you can import your own photographs or artwork to include in picture frames.

If you've included lamps, you can adjust them to provide realistic interior lighting. HGTV Home Design also includes an *Environment* panel where you can adjust the natural light coming in through windows and skylights.



For details, see *Chapter 11: Applying Materials* and *Chapter 12: Adjusting Lighting*.

Sharing Your Projects

HGTV Home Design provides several ways to share your projects with others. Of course, you can print the floor plan or create an image file of it to give to a contractor, but you can also take pictures of the 3D view and create Apple® QuickTime® movies to show a virtual reality tour of the interior space.



See *Chapter 13: Printing and Exporting Projects* and *Chapter 14: Taking Pictures and Making Movies* for details.

Registering Your Software

When you first start HGTV Home Design, you are asked to register your copy of the program. Before you start your first project, please take a moment to register by clicking **Register Now** in the *Registration* dialog box.



After you register, you are entitled to:

- **Free Technical Support:** We're committed to making HGTV Home Design work for you. If you have questions that aren't answered in this manual or in the online help system, please contact us online.
- **Immediate Notification of Upgrades:** You'll hear about new versions of HGTV Home Design as soon as they're available.
- **Registered User Discounts:** As a registered user, you're eligible for special prices on many new products and bonus offers on our other best-selling software products.

If you click **Register Later** in the *Registration* dialog box, the dialog box appears each time you start HGTV Home Design. Also, you can register by choosing **Online Registration** from the **Help** menu.

Learning HGTV Home Design

HGTV Home Design provides several ways to help you learn to work with its features and functions. You can view video tutorials for quick overviews of working with the program, work with sample projects or go through the *Quick Start Guide* section of *Chapter 3: Getting Started*.

- **Video Tutorials:** You can view videos to get quick overviews of program features prior to looking at the sample projects or before you start working on your own projects. These videos, available online and on the *HGTV Home Design* disc, show you how to get started quickly with HGTV Home Design and demonstrate basic features and functionality:
 - User Interface Overview
 - Creating 2D Plans
 - Adding Objects
 - Applying Materials
 - Lighting
 - Adding an AutoRoof
 - Customizing Roofs.

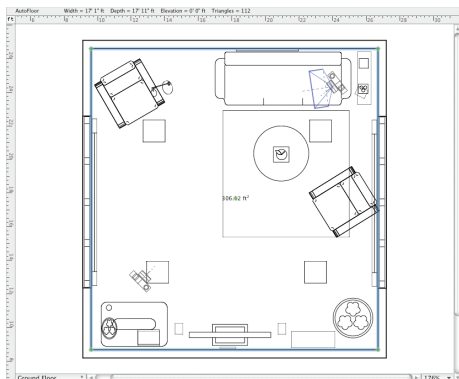


You access the online video tutorials from the *Welcome* dialog box by clicking **View Video Tutorial**. To view the tutorials from the disc, insert the *HGTV Home Design* disc into the disc drive and then double-click the **HGTV Tutorial Videos** icon in the disc's window.



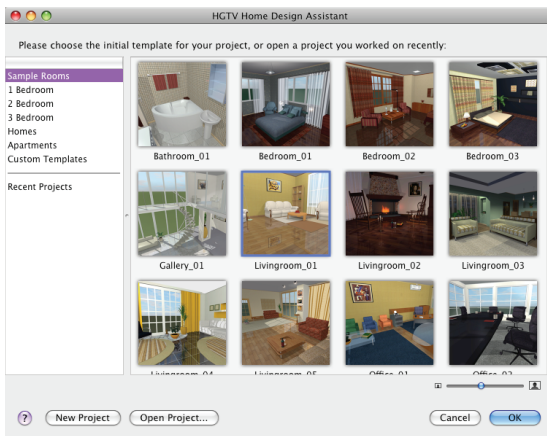
HGTV Tutorial Videos

- **Sample Projects:** Check out the 2D layout view or the 3D realistic view of sample projects that others have created. You can use these as a basis for starting your own designs.





You open sample projects from the *HGTV Home Design Assistant* dialog box.



- **Quick Start Guide:** In *Chapter 3: Getting Started*, the *Quick Start Guide* section gives overview information about HGTV Home Design's basic features. You learn how to make walls, add doors, windows and furnishings, and how to apply materials. You can also learn quickly how to set up lighting, add cameras and print a floor plan.

Viewing HGTV How-To Videos

The *HGTV Home Design* disc includes How-To video segments (as QuickTime, *.mov files) from the HGTV and DIY networks.

To view a How-To video:

- 1 Insert the *HGTV Home Design* disc into your Macintosh computer's disc drive.
- 2 If necessary, open the disc in a Finder® window.
- 3 In the disc's window, double-click the **HGTV How-To-Videos** icon.
- 4 Double-click one of the video files.



QuickTime opens and starts playing the video segment. For information about working with QuickTime, see QuickTime Help.

You can also view the HGTV How-To videos online. To do so, choose **View How-To Videos** from the **Help** menu.

Conventions Used in this Document

- **Bold text** indicates names of menus, menu commands, buttons, options, text box labels, tabs, checkboxes, lists and other items in the program.
- *Text in italics* refers to names of windows, dialog boxes, discs and folders. It is also used for chapter and section references, and to introduce important new terms.
- Commands in submenus are given as **Submenu ▸ Submenu Command**. For example, the **Left Edges** command on the **Align** submenu is given as “Choose **Align ▸ Left Edges** from the **Arrange** menu”.
- A keyboard shortcut groups several keys that are pressed together to perform a menu command. For example, Cmd-S means to hold down the **Command** (⌘) key while pressing the **S** key and then to release both of the keys.

- If you have a multi-button mouse, click means to click the left mouse button. Right-click means to click the right mouse button.

If you have a single-button mouse, click means to click the mouse. When you Control-click, you press the Control key as you click the mouse. (Control-click is equivalent to a right-click.)

If you have a Magic Mouse, normally the Secondary click is equivalent to the right mouse button. But this depends on how you've set up the preferences for the Magic Mouse.

With a Multi-Touch™ trackpad, read your documentation to learn how to set the preferences for various clicks.

- A shortcut menu is the menu that appears when you right-click (or Control-click) an object. The commands on the shortcut menu depend on the object.

Cut	⌘X
Copy	⌘C
Paste	⌘V
Duplicate	⌘D
Delete	⌘

- References to the Finder and interactions with Mac OS® X, in general, are written for Leopard®. If your computer has a different version installed, adjust the instructions accordingly.
- Warnings, notes, and tips look like this:

Make Object Invisible
Lock Object

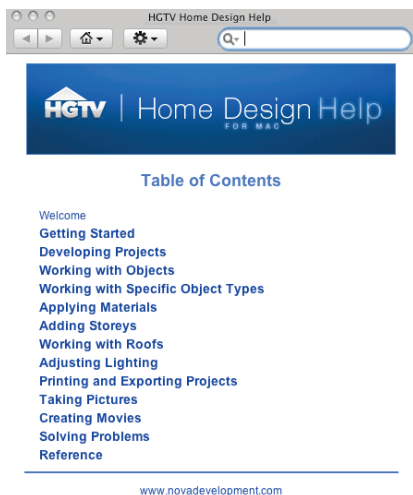
Note: *You should always make backups of your work.*

Getting Help

HGTV Home Design provides a help system with task-based procedures and troubleshooting information. If you cannot find the answers to your questions, you can visit the Nova Development support page online.

Using HGTV Home Design Help

You can open HGTV Home Design Help from the **Help** menu.



To locate a topic in the help system:

- 1 Choose **HGTV Home Design Help** from the **Help** menu.
- 2 Click a section heading in the Table of Contents.
Some sections have sub-sections.
- 3 Then click a specific topic in the list of topics for that category.

You can also click a **Help** button in a dialog box to open the help system to a specific topic.



To search for a specific topic:

- 1 Choose **HGTV Home Design Help** from the **Help** menu.
- 2 Type one or more keywords in the help system's search box.
- 3 Press **Return**.
- 4 Click a topic (Snow Leopard®) or double-click a topic (Leopard).

You can also type keywords into the **Search** box in the **Help** menu, itself. After you press **Return**, a list of topics appears in the **Help** menu. Click a topic to view it.

Reading the User's Manual Online

You can open a PDF version of the user's manual from the *HGTV Home Design* disc by double-clicking the **User Manual.pdf** icon in the disc's window.



User Manual.pdf

With the PDF version of the manual you can search the entire manual for information or use the bookmarks to go directly to a section.

Contacting Technical Support

If you have a question after reading this manual and viewing HGTV Home Design Help and you have an Internet connection, you can view support options online at:

<http://www.novadevelopment.com/support>

From the support page, you can find detailed answers to frequently asked questions (FAQs), search through the online knowledge base, and send a message to the Technical Support team.

INSTALLING HGTV HOME DESIGN

This chapter lists the system requirements for using HGTV Home Design for Mac and gives procedures for installing, updating, and uninstalling HGTV Home Design.

Chapter 2 at a glance:

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Updating the Program.....	17
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System Requirements

To run HGTV Home Design effectively, your system must meet the following minimum requirements:

- Mac OS X v10.5 Leopard, Mac OS X v10.6 Snow Leopard or later
- Intel®-based Macintosh computer (Intel Core® 2 Duo is recommended.)
- 512 MB RAM (2 GB is recommended.)
- 64 MB of video RAM (128 MB is recommended.)
- 1 GB available disk space (approximately)
- DVD drive
- 1024x768 (or higher resolution) display

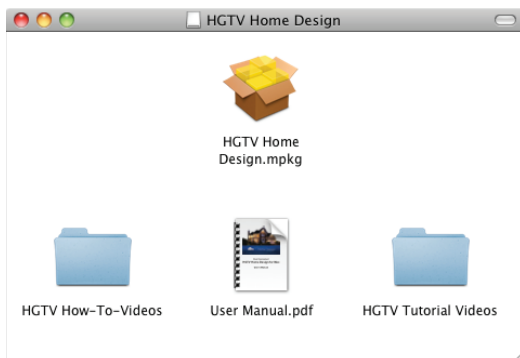
You should also have Apple QuickTime 7 or later installed. If you plan to edit 3D models, you need Google® SketchUp™ 6 or later.

Installing HGTV Home Design

You use an installer to install HGTV Home Design on your computer.

To install HGTV Home Design:

- 1 Insert the *HGTV Home Design* disc into the disc drive.
- 2 If necessary, open the disc in the Finder.



- 3 Double-click the **HGTV Home Design.mpkg** icon.



- 4 Follow the instructions in the installer.

Updating the Program

Occasionally, an update to HGTV Home Design may become available. If you have an Internet connection, you can have HGTV Home Design check for updates automatically or you can check for updates manually.

Note: *To be able to update the program, the application and supporting files should be in their default locations.*

To check for the latest update, choose **Check for Updates** in the **HGTV Home Design** menu.

To have the program automatically check for updates:

- 1 Choose **Preferences** from the **HGTV Home Design** menu.
- 2 In the *Preferences* dialog box, click the **Miscellaneous** tab.

- 3 Select the **Automatically check for updates** checkbox.
or
To only check for updates manually, clear this checkbox.
- 4 Click **OK**.

Uninstalling the Program

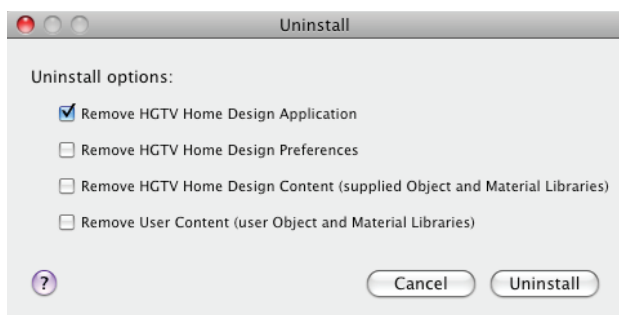
You can uninstall the program with the uninstaller or manually.

Uninstalling the Program with the Uninstaller

You can uninstall the entire program and all its associated files or just remove selected files.

To uninstall the program with the Uninstaller:

- 1 Choose **Uninstall** from the **HGTV Home Design** menu.



- 2 In the *Uninstall* dialog box, select the items to delete.
 - To delete the program files and folders, select: **Remove HGTV Home Design Application**, **Remove HGTV Home Design Preferences** and **Remove HGTV Home Design Content**.
 - To delete objects and materials that you have added to the library, select the **Remove User Content** checkbox.
- 3 Click **Uninstall**.

Note: *If you plan to re-install HGTV Home Design and want to keep your custom materials and documents, do NOT select the **Remove User Content** checkbox. You cannot restore the user libraries by re-installing HGTV Home Design.*

Uninstalling the Program Manually

To remove the program manually, move the following files and folders to the Trash and then empty the Trash:

- **HGTV Home Design.app** from the *Applications* folder
 - **com.novadevelopment.HGTVHomeDesign.plist** file from the *~/Library/Preferences/* folder
 - If you don't need the custom materials, delete the *HGTV Home Design* folder from the *~/Library/Application Support/Nova Development/* folder
- where “~” refers to your *Home* folder.

Note: *If you plan to re-install HGTV Home Design and want to keep your custom materials and documents, do NOT delete the HGTV Home Design folder.*

GETTING STARTED

This chapter gives you information about setting up HGTV Home Design after installation and gives overview information for working with HGTV Home Design features — including a Quick Start Guide.

Later chapters include more details about the features presented in this chapter.

Chapter 3 at a glance:

Setting Up HGTV Home Design.....	22
Project Design Workflow	24
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Setting Up HGTV Home Design

After you install HGTV Home Design, you may want to take a few minutes to set up the program before starting on your first project.

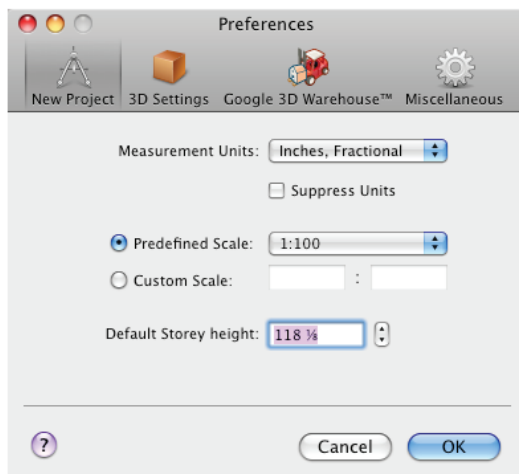
Register HGTV Home Design

Register the program to get free technical support, information about new versions of HGTV Home Design, and bonus offers.

To register online, click **Register Now** in the *Registration* dialog box or choose **Register Online** from the **Help** menu. Your default browser opens to a registration page where you can enter your information.

Setting Basic Program Preferences

Before you start working you may want to make some quick adjustments to the HGTV Home Design preferences. To do so, choose **Preferences** from the **HGTV Home Design** menu (Cmd-,) to adjust application settings. (For more details about customizing the application, see *Chapter 4: Using HGTV Home Design.*)



The New Project tab

Settings on this tab apply to all new projects. (To adjust the settings for an existing project, use the **Project Setup** command on the **File** menu.)

- Adjust the default **Measurement Units** as needed. You may want to set this to **Feet-Inches** or **Meters**.

You can leave the other settings unchanged.

The 3D Settings tab

The 3D settings affect the quality and speed when rendering a picture in the 3D view. Leave these settings unchanged unless you have a specific reason to change them immediately.

Before changing any of these, try “walking around” in the 3D view. If you feel that your computer renders the scene quickly enough, try clearing the **Decrease Quality when Moving** checkbox. When this checkbox is clear, the picture quality remains the same when moving. With this checkbox clear, again walk through a 3D scene to check performance.

The Google 3D Warehouse™ tab

The options on this tab control how you import Google SketchUp objects. Keep the default settings unless you have a specific reason to change them.

The Miscellaneous tab

Determine how the program should start up.

- To have the *Welcome* dialog box open when you start the program, keep the **Show Welcome dialog on start-up** checkbox selected.
- To show the *HGTV Home Design Assistant* dialog box on startup, clear the **Show Welcome dialog on start-up** checkbox and select the **Show Assistant on start-up** checkbox.
- To always open to a new, blank project, clear both these checkboxes.

You can adjust a setting for better performance.

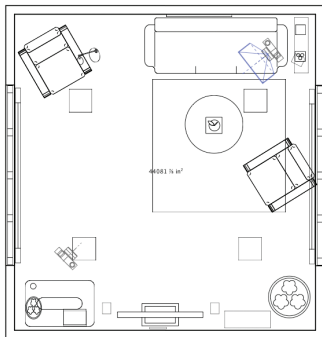
- For better computer performance, clear the **Animate Library 3D Preview by default** checkbox.

You can adjust settings related to checking for updates.

- To have HGTV Home Design, check for program updates regularly, select the **Automatically check for updates** checkbox.
- To only check for updates manually, clear this checkbox and then choose **Check for Updates** from the *HGTV Home Design* menu. (You may want to clear this checkbox if you have a dial-up connection.)

Project Design Workflow

In general, you do most of your home design development work in the 2D view and use the 3D view to choose materials, to match colors, to adjust lighting and to take pictures of your interior design.



2D View



3D View

In the 2D view, you insert (and draw) objects to create your design project. Each HGTV Home Design design project has many different objects (such as walls, floors, ceilings, doors, furniture, and lighting sources). You draw objects like walls, floor and ceilings by using tools in the 2D view. You add more complicated objects from the available object libraries.

Once you have an object in your design, you can delete, move, resize and rotate it and apply materials (textures) to it.

The major steps of the design process, if starting from scratch, are:

- 1 Create a new, blank project.
- 2 Adjust the project settings, if needed.
- 3 Draw walls.
- 4 Add floors and ceilings.
- 5 Add doors and windows.
- 6 Add furniture and other objects.
- 7 Set up the lighting
- 8 Apply materials to objects.
- 9 Add cameras.
- 10 Print the 2D plan, take pictures in the 3D view and, possibly, create movies or QTVR files (QuickTime virtual reality movies).

This is the general flow, but you may change the order of these steps. For example, you can draw all the walls, insert all the furniture, and then change their materials. Alternatively, you can change materials right after adding each new object. Some steps may be omitted. For example, you may want to develop a spatial design without adding furniture.

To create a two-storey building, you can add the other storey after setting up the first storey. In the second storey, HGTV Home Design duplicates the exterior walls from the first storey. You can develop the floor plan for the second storey as you did for the first storey by following steps 3-9 as needed. If you add a roof, you can also add a loft to your project.

If you start from an existing project or a sample project, you might spend most of your time moving or removing existing objects and applying different materials.

Quick Start Guide

This section gives you a brief introduction to basic features. See the relevant chapters in this manual or topics in the online help system for more detailed information.

Creating a New Project

Before you start working, you must open an existing project or create a new one.

To create a new blank project:

- Choose **New** from the **File** menu.
- Click **New Project** on the *Welcome* dialog box.
- If the *Assistant* dialog box is open, you can click **New Project**.

To create a project using a sample project:

- 1 Choose **New from Assistant** from the **File** menu.
or
Click **Browse Sample Projects** on the *Welcome* dialog box.
- 2 In the *Assistant* dialog box, select a category on the left.
- 3 Scroll through the sample projects on the right.
- 4 Select a sample and click **OK**.
or
Double-click a sample.


Drawing Walls

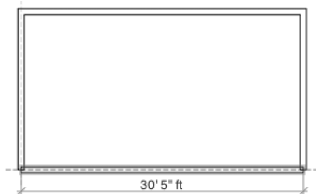
If you start with a blank project, you begin by adding outer walls and drawing interior walls. You can set the wall height, which is actually the whole storey height, in the **Building Properties** tab of the Inspector. Before you start drawing walls, you can set the wall parameters in the **Object Properties** tab of the Inspector. You can also set parameters by selecting a template from the **Master Walls** list in the Inspector.

Drawing a room

You draw a room or the exterior of a building by creating several connected walls.

To draw a room

- 1 If the 2D view isn't showing, choose **Toggle 2D/3D View** from the **View** menu, or click the **2D View** button on the toolbar.
- 2 Click the **Straight Wall** button in  the toolbar.
- 3 Move the pointer over the workspace area and click in the layout to start drawing a wall.
- 4 Press the **Shift** key as you move the pointer and then click to specify the end of the first wall and start the next wall (the first corner).
- 5 Continue pressing the **Shift** key as you move the pointer and then clicking to add two more corners.
Each click specifies the end of the current wall segment and the start of another one.
- 6 Click the open end of the first wall segment to set the end of the last wall.
HGTV Home Design encloses the room.




- 7 If you need to resize the room, select one of its walls and drag it.

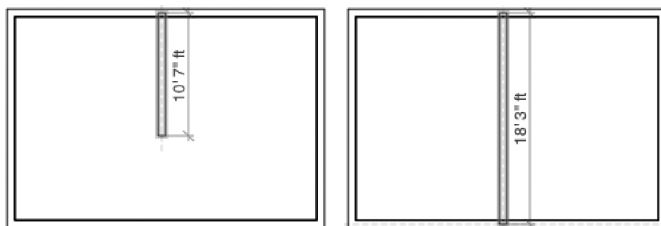
Drawing an interior wall

After drawing the exterior walls, you can draw interior walls to subdivide the space. One or both ends of an interior wall may be joined with existing walls.

To draw an interior wall:

- 1 If the 2D view isn't showing, choose **Toggle 2D/3D View** from the **View** menu, or click the **2D View** button on the toolbar.
- 2 Click the **Straight Wall** button in  the toolbar.
- 3 Click a location on the outer wall to start drawing the interior wall.
- 4 Click a location on the opposite outer wall to place the end of the interior wall or double-click a spot between the two exterior walls.
- 5 If necessary, adjust the location of the interior wall by dragging it.

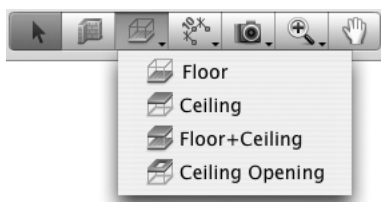
The joint between the interior wall and the outer wall divides the outer wall into two parts.



Adding Floors and Ceilings

HGTV Home Design automatically adds the floor and the ceiling when you create a closed shape with several wall segments. Therefore, you normally don't have to add ceilings and floors to your projects.

To draw floors and ceilings yourself, use the **Ceiling/Floor** button on the 2D toolbar and specify which element to draw.



The shape of a floor or ceiling is determined by its corners. You click to specify a corner, and then click where the next corner should appear on the floor plan, and so on. Double-click where the last corner should be located.

Adding Doors and Windows

You do not need to leave gaps in the wall for future doors or windows. HGTV Home Design automatically creates an opening when you place a window or a door in the wall.

To add a door or window:

- 1 Click the **Building Elements** button on the toolbar.
or
Choose **Library ▶ Building Elements** from the **Window** menu.



- 2 In the pop-up menu at the top of the pane, specify **Doors** or **Windows**.
- 3 Scroll through the thumbnails for the doors or windows.
- 4 Drag a door or window onto a wall.
- 5 As needed, adjust the location of the door or window by moving it along the wall.
- 6 Adjust the parameters of the door or window by changing settings on the **Object Properties** tab of the Inspector.

Adding Furniture

You may now add furniture into the space. If you follow this example, you add a chair from the object library and adjust its size and location.

To add a chair:

- 1 Click the **Furnishing** button on the toolbar.
or
Choose **Library** ➤ **Furnishing** from the **Window** menu.
- 2 Under the currently open category's thumbnails, type **chair** in the **search** box and press **Return**.
- 3 Scroll through the list of chairs.
- 4 Select one of the displayed chairs and drag it into the project layout.

If there's a category for the furnishing you want to add (for example, **Armchairs**), you can specify that category in the pop-up menu and then look through its thumbnails.

To change the size of the chair:

- 1 With the chair selected, choose **Inspector** ➤ **Object Properties** from the **Window** menu.
or
If the Inspector is showing, click the **Object Properties** tab.
- 2 To unlock the **Width**, **Depth** and **Height** boxes, click the **Lock** icon next to them.
- 3 Type the dimensions for the chair.

To make the furniture 'snap to' walls, you set Glue by checkboxes in the object's **Object Properties** tab.

To move the chair:

- 1 To make the chair snap to the floor, if necessary, select the **Glue by Bottom** checkbox in the Glue by section.
(Selecting **Glue by Bottom** prevents the object from hovering above the floor.)
- 2 If you need to turn the chair, drag the **Rotate** slider in the Inspector or type a specific value.
- 3 To move the chair into the proper position, drag it.

Working with Materials

The objects supplied with HGTV Home Design have default materials. The object's material determines its color and also the light dissipation and light reflection characteristics in the 3D view. Many objects have several materials applied.

When creating a specific interior design, you may want certain objects in your design have the same color or finish. To make this type of change you usually work in the 3D view where you can see a realistic image of the project.

In this quick start example, you change the materials of a sofa and then copy them to an armchair.

To add a sofa and change its material:

- 1 In the 2D view, click the **Furnishing** button on the toolbar.
or
Choose **Library ► Furnishing** from the **Window** menu.
- 2 Select the **Sofas** category from the pop-up menu in the Library pane.
- 3 Drag the **California VZ** sofa to the project layout.
- 4 Choose **Toggle 2D/3D View** from the **View** menu.
or
Click the **3D View** button on the toolbar.
- 5 While the sofa is selected, choose **Inspector ► Materials** from the **Window** menu, or click the **Materials** tab in the Inspector.
All the materials used in the sofa appear in the **Object's Materials** list at the top of the tab.

Note: *If this is the first time you've opened the **Materials** tab, it may take a few minutes for HGTV Home Design to install all the materials.*


- 6 In the **Object's Materials** list, select **Wood/ArchiBase_Cherry**.



- 7 In the Materials Gallery section, open the **Wood** category in the pop-up menu.
- 8 Scroll through the samples and click **026 Sharp Oak**.
It replaces the selected material for the sofa.



To copy the material from the sofa to an armchair:

1. In the *Library* pane, specify the **Armchairs** category.
2. Scroll through the thumbnails, and then drag the **California** armchair into the project.
3. With the armchair still selected, on the **Materials** tab of the Inspector, select **Wood/ArchiBase_Cherry** in the **Object's Materials** list.
4. To replace this material with the one used for the sofa, click the  **Material Picker** button on the **Materials** tab.

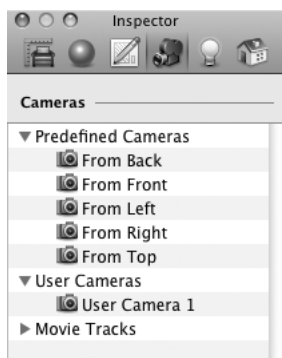
5. With the **Material Picker** tool active, click the sofa's wooden area to pick up that material and change it in the selected armchair.
- 6 Click the **Material Picker** button again to deactivate it.

To apply a material to walls, the ceiling or the floor, you can drag the material onto the object in the 3D view.

Working with Cameras

In the 3D view, you 'walk' to get to any place within the project's 3D space. By placing cameras, you can specify different locations in the 3D space and then quickly view any of those locations at any moment.

By default, HGTV Home Design sets up five stationary cameras in each project. The **Cameras Properties** tab of the Inspector lists the predefined and custom cameras.



One reason to add cameras is to take 'before' and 'after' pictures when you're developing an interior design. For example, you could add cameras to take pictures of a room from different angles, take 'before' pictures, change the color of the walls and then take 'after' pictures.

To add a camera:

- 1 If the 2D view isn't showing, choose **Toggle 2D/3D View** from the **View** menu, or click the **2D View** button on the toolbar.
- 2 Click the **Camera** button on the toolbar. (If the **Camera** button doesn't show, click the arrow and then click **Camera**.)



- 3 Click a point on floor plan where you'd like to place a new camera. The camera object has handles (green dots) when selected.
- 4 Drag the camera or a handle to change the location or orientation.

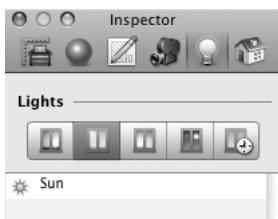


Tip: *The selected camera moves along as you 'walk' in the 3D view. So 'walking' is another way to point the camera in a specific direction.*

Setting Up the Lighting

You can use several kinds of light sources in your interior design projects: sunlight, light from lamps and firelight. You manage light sources in the current project with the **Lights Properties** tab of the Inspector. It lists all the light sources.

Daytime has four predefined states. To specify one, click a corresponding button in the Inspector: **Morning**, **Day**, **Evening** or **Night**. With the last button on the Lights toolbar, you can specify the time you prefer.



Electric light sources are under your control. You can add, move and delete them from the layout. Also, you can use the Inspector to set their luminosity and color.

To add a lamp:

- 1 Click the **Furnishing** button on the toolbar.
or
Choose **Library ▸ Furnishing** from the **Window** menu.
- 2 Select the **Lamps** category in the pop-up menu.
- 3 Scroll through the thumbnails and drag a lamp into the 2D view.

Lamps must have a Glue by checkbox selected in the **Object Properties** tab in the Inspector. Set the lamps to stick to the ceiling (**Glue to Top**) or wall (**Glue by Back**). For lamps that stand on the floor or on a table, select the **Glue by Bottom** checkbox. By setting a Glue by checkbox you can move a lamp in 3D without detaching it from the selected surface.

To change the luminosity and color of a lamp, select the lamp and adjust its parameters in the **3D Window Properties** tab of the Inspector.

You can also turn any lamp on or off.

To turn light sources on or off, click the **light bulb** icon in the **Lights** list at the bottom of the **Lights Properties** tab of the Inspector.



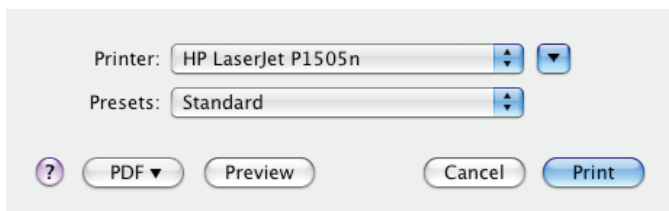
Printing a Floor Plan

You can either print a floor plan or export it as a graphic file.

Before printing the layout, you may want to add measurements or some text to it. To do this, choose **Measurement** or **Text Annotation** from the **Insert** menu.

To print a floor plan:

- 1 Choose **Print** from the **File** menu.

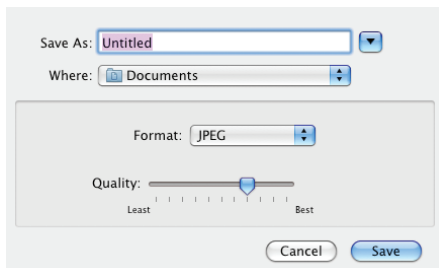


- 2 In the *Print* dialog box, specify the printer to use.
- 3 Click **Print**.

HGTV Home Design uses the scale that is set in the *Project Setup* dialog box to print the project.

To export a floor plan as a graphic file:

- 1 Choose **Export 2D Plan** from the **File** menu.



- 2 Select the file format.
- 3 If available for the file format, adjust any export settings.
- 4 Specify where to save the graphic file.
- 5 Type a file name.
- 6 Click the **Save** button.

From the *Print* dialog box and from the *Export 2D Plan* dialog box, you can also create a PDF file of the 2D layout.

Taking Pictures of the 3D View

You can take pictures or create movies when in the 3D view.

To take a picture:

- 1 Determine a point from which the picture will be taken.

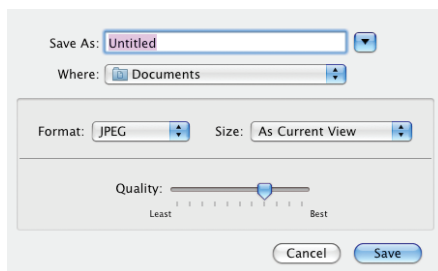
To do this, walk to some point in 3D. If necessary, adjust the camera position and orientation using the Walk Control that appears at the bottom of the 3D window.



Use the larger central navigator for your 'movement'. The smaller one on the left tilts the camera. The smaller one on the right moves the camera up and down.

To make the Walk Control visible all the time, choose **Display 3D Walk Control** ▸ **Always** from the **View** menu.

- 2 When the scene appears as you would like for the pictures, choose **Export 3D View** from the **File** menu.



- 3 Select the file format.
- 4 If available for the file format, adjust any export settings.
- 5 Specify where to save the graphic file.
- 6 Type a file name.
- 7 Click the **Save** button.

Note: *All objects in HGTV Home Design have a **Visibility** option in the Project Tree on the Library pane. If you don't want an object to be shown in the 3D view or on the floor plan, make the object invisible. To do this, select the object and click the **eye** icon in Project Tree.*

You can also create movie tracks when in the 3D view. For details see *Chapter 14: Taking Pictures and Making Movies*.

USING HGTV HOME DESIGN

This chapter introduces you to the important areas of the HGTV Home Design window, to settings for customizing your copy of the program, and to the different workspace views and their supportive features.

You also learn how to start a new project, open an existing project and save a project.

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What Is an HGTV Home Design Project?

An HGTV Home Design project is a file in a special format (*.li3d) that stores the floor plan drawing, 3D models, materials, lighting information and other aspects of the project.

Each HGTV Home Design project is based on the 2D layout of a building. The floor plan shows walls, windows, doors, furniture, other added objects and any added cameras. The project's file also includes the various project settings, which can be modified in the *Project Setup* dialog box.

From the 2D floor plan, HGTV Home Design creates a 3D representation when you show the 3D view. The 3D view is available at any time while you have the project open. You can modify the project by editing the layout in the 2D view as well as in the 3D view.

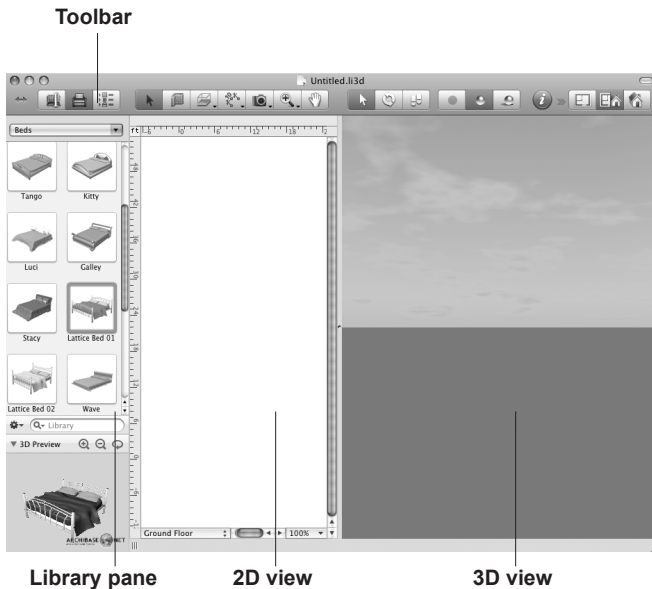
Exploring the HGTV Home Design Workspace

The HGTV Home Design workspace has several major parts to help you develop your interior design project: the main program window, the Inspector and the *HGTV Home Design Assistant* dialog box.

Main Window

The main workspace window has a toolbar across the top with several sets of toolbar buttons, a *Library* pane and the view area.

The available toolbar buttons depend upon the active project view, but there are four main groups: *Library pane buttons*, the *2D toolbar*, the *3D toolbar* and the *View toolbar*.



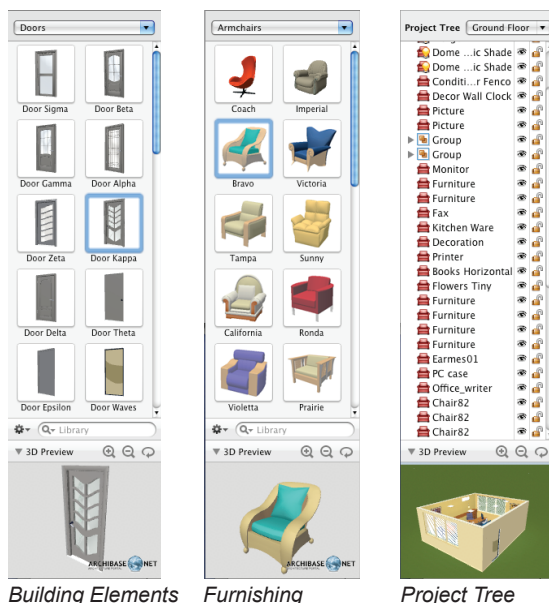
The Library pane

You use the Library pane to add objects to your design or to view a list of objects already in your project.

There are two libraries: **Building Elements** and **Furnishing**. The Building Elements library has objects such as doors, windows, columns and other structural elements. The Furnishing library includes furniture, appliances, lamps and decorative elements. You add objects to a design by dragging them from the library into the workspace. You can search for specific objects instead of browsing through a category.

The Project Tree lists the objects that you have added to the current project. It groups the objects by type and by floor; although, if you wish, you can view all the objects in the project at once. When you select an object in the Project Tree, its preview shows at the bottom and the object is also selected in the 2D and 3D views. By clicking the **eye** icon you can show or hide objects in the project. By clicking the **lock** icon you can prevent objects from being moved accidentally.

Objects get a default name when you add them to the project. For example, all wall segments are named “Wall”. If you need to distinguish objects of the same type, assign different names to them. To change the name of an object, double-click it in the Project Tree.



Use the buttons above the *Library* pane to show or hide the *Library* pane, to show a library or to show the Project Tree. You drag the handle at the bottom-right corner of the pane to expand or collapse the pane.

Seeing different workspace views

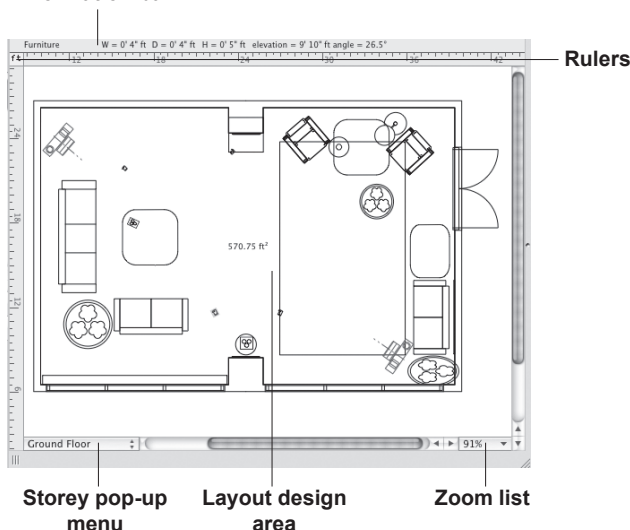
There are two workspace views: 2D and 3D. You use the 2D view for drawing floor plans and use the 3D view to see the objects in a more realistic representation.



You use the buttons on the View toolbar to show the different views in the workspace: 2D view, 3D view or a split view showing both. When in split view mode, you can drag the divider to adjust the size of the two viewing areas.

In the 2D view, you add objects from the library and draw walls, floors and ceilings.

Information bar



You can show or hide rulers, show or hide a grid, or use guidelines in this view.

The Information bar above the workspace is a status bar that gives information about the currently selected object or currently active tool when drawing objects. It shows in the workspace when the rulers are available. The **Storey** pop-up menu in the bottom-left corner shows the current storey. The **Zoom** list on the right shows the current zoom level.



The 2D toolbar has tools for adding walls, ceilings, floors and other objects. You can also zoom in or out of the floor plan and pan around.

In the 3D view, you apply materials to objects, adjust lighting, ‘walk through’ the somewhat realistic representation of the project, and take pictures or make movies of the interior.



You can add objects and move items around in this view, too.



The 3D toolbar has buttons for selecting objects, for looking around, for walking around, and for adjusting lights and shadows. There’s also a button for taking a picture of the current 3D view.

The Inspector

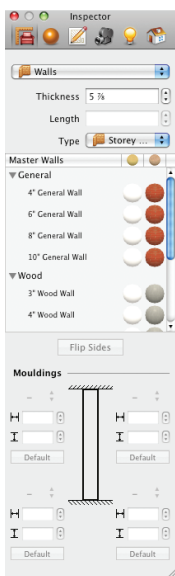
The *Inspector* is a floating window where you can change object properties, control cameras and manage storeys. The Inspector displays the settings for the currently selected object.

To open the Inspector:

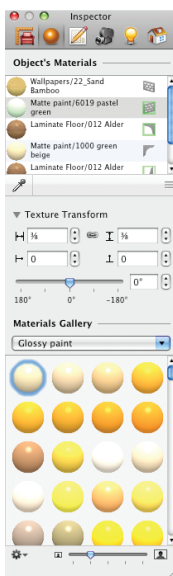
- Choose **Show Inspector** from the **Window** menu. (Cmd-I)
- Click the **Inspector** button on the toolbar.



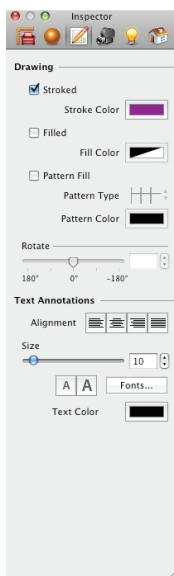
To open the Inspector to a specific tab, choose commands on the **Inspector** submenu on the **Window** menu.



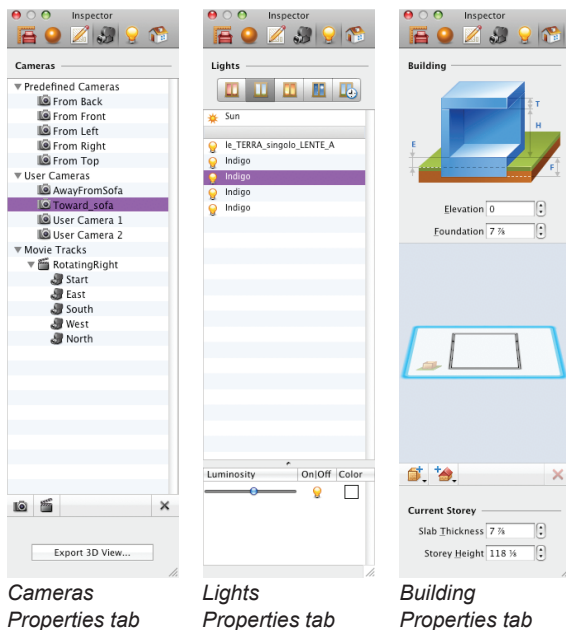
Object Properties
tab



Materials tab



2D Properties
tab



The Object Properties tab

The **Object Properties** tab has the settings that control the properties of most objects. When you select an object, HGTV Home Design shows the corresponding set of properties.

The Materials tab

You use the **Materials** tab to change the various materials of objects and to create new materials. You access the built-in library of materials in this tab.

The 2D Properties tab

With the settings on the **2D Properties** tab you specify the appearance of objects in the 2D view.

You use the settings in the Drawing section with drawn objects: walls, ceilings and floors. You can modify the color of outlines, filling, color and

type of the fill pattern. The Text Annotations section has text formatting tools.

The Cameras Properties tab

The **Cameras Properties** tab lists all the cameras in the current project: predefined, custom and movie cameras.

HGTV Home Design, by default, includes five predefined cameras, which are always present in the list. You can add and remove custom cameras, movie cameras and movie tracks.

The camera selected in the Inspector defines the point of view for the 3D view.

The Lights Properties tab

The **Lights Properties** tab controls light sources: daylight and any lamps or fireplaces added to the project.

To change brightness or color of a light source, select it in the list and adjust the setting in the settings at the bottom of the tab. To turn a light on or off, click its **light bulb** icon.

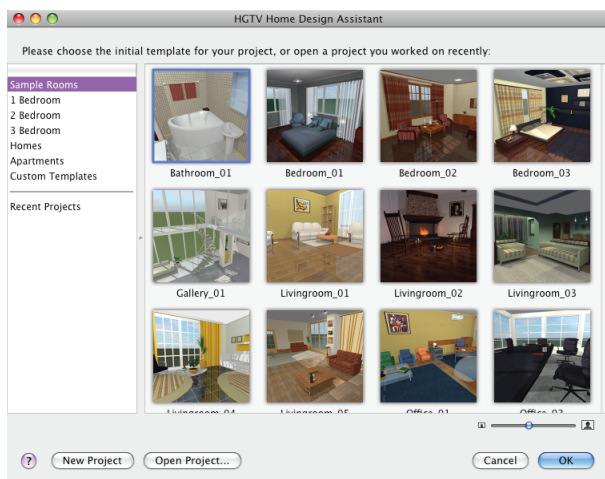


The Building Properties tab

You use the **Building Properties** tab to add and remove storeys. You can also change the storey and slab height or specify any floor to be the ground level.

The HGTV Home Design Assistant Dialog Box

When you start HGTV Home Design, by default, it opens the *Welcome* dialog box. From this dialog box you can access the *Assistant* dialog box, which has a collection of pre-designed projects, by clicking the **Browse Sample Projects** button. You can open the *Assistant* dialog box at any time by choosing **New from Assistant** from the **File** menu (Cmd-Shift-N).



You use the *Assistant* dialog box to specify which project to open or how to start a new project. In this dialog box, you can

- Select a project from the provided samples.
- Open a custom template, which is one of your projects saved as a template.
- Access a recently opened document.
- Open any project on your computer.
- Start from a blank project.

An easy way to start working with HGTV Home Design is to open one of the sample projects from the *Assistant* dialog box.

Using sample projects

The sample projects that are available through the *Assistant* dialog box are intended for:

- **Learning the program.** You can open and change a sample project to see how the program works.

- **Creating new projects.** You can modify a pre-designed project to meet your needs, or create a custom template and then use it to make variations of the project (such as changing the furniture arrangement, adding decorations and so on).

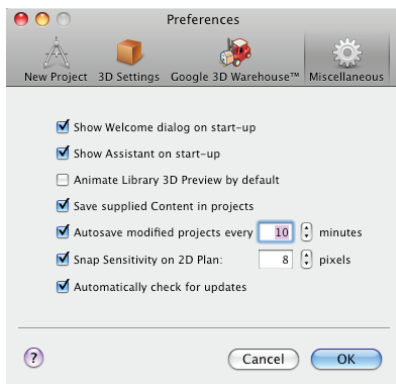
On the left side of the *Assistant* dialog box, the sample projects are grouped into categories. When you select a category, the preview area on the right shows thumbnails of the templates in that category. To open a template, select its thumbnail on the right and then click **OK**, or double-click the thumbnail.

Customizing HGTV Home Design

Before starting your work on the first project, you may want to set up HGTV Home Design to suit your needs. The program settings are available in the *Preferences* dialog box and apply to all projects.

To adjust general program settings:

- 1 Choose **Preferences** from the **HGTV Home Design** menu.



- 2 In the *Preferences* dialog box, if necessary click the **Miscellaneous** tab.

- 3 To see the *Welcome* dialog box each time you start the program, select the **Show Welcome dialog on start-up** checkbox. (By default, the *Welcome* dialog box appears on startup.)

To see the *HGTV Home Design Assistant* dialog box each time you start the program, clear the **Show Welcome dialog on start-up** checkbox, and then select the **Show Assistant dialog on start-up** checkbox.

To not see either the *Welcome* or the *Assistant* dialog box clear both checkboxes.

- 4 To have 3D objects automatically rotate in the *Library* pane's preview area after you select them, select the **Animate Library 3D Preview by default** checkbox. To manually control the animation, clear this checkbox. (Selecting this checkbox may affect your computer's performance.)
- 5 To specifically save all objects with the project instead of linking library objects, select the **Save supplied Content in projects** checkbox. To minimize a project's file size by linking to library objects, clear this checkbox.

Note: *This checkbox only affects objects from the built-in library. HGTV Home Design always saves modified library objects and any imported objects with the project.*

- 6 To have HGTV Home Design automatically save a copy of a project to the same folder as the original project as you work on it, select the **Autosave modified projects** checkbox and then specify how often to save the files. To turn off auto-save, clear this checkbox.

Note: *If the program quits unexpectedly and you start it up again, HGTV Home Design opens the autosaved copy.*

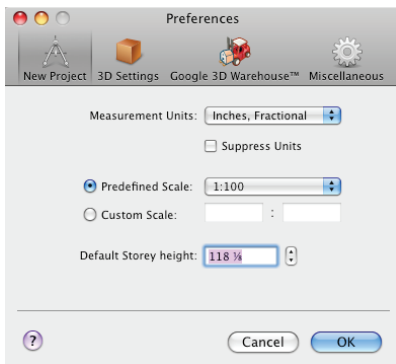
- 7 To control whether the snapping feature is on in the 2D view and how sensitive it is, select the **Snap Sensitivity on 2D Plan** checkbox and specify a distance in pixels. To turn off 2D snapping, clear this checkbox.

- 8 To have HGTV Home Design automatically check for updates, select the **Automatically check for updates** checkbox. To only check for updates manually, clear this checkbox.
- 9 Click **OK**.

You can adjust the default settings that HGTV Home Design uses for all new projects.

To adjust the settings for new projects:

- 1 Choose **Preferences** from the **HGTV Home Design** menu.
- 2 In the *Preferences* dialog box, if necessary click the **New Project** tab.



- 3 As needed, specify the correct units for new projects from the **Measurement Units** pop-up menu.
- 4 If you don't want to see the units in 2D view, select the **Suppress Units** checkbox.
- 5 To specify the scale for the 2D view, select **Predefined Scale** and then select a scaling factor from the pop-up menu.
or
Select **Custom Scale** and type values for the scaling factor in the boxes.
- 6 Specify a height in the **Default Storey height** box.
- 7 Click **OK**.

Note: To change the settings for an active project use the Project Setup dialog box.

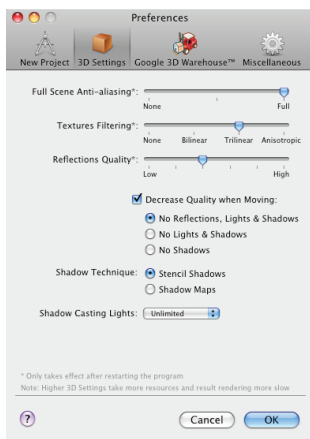
The 3D settings affect the quality and speed of rendering a picture in the 3D view. To apply some of these changes, you must restart the program.

To determine what settings you should apply, you may try testing the various settings with a sample project and evaluate the differences that occur to find out which settings are acceptable to you on your system.

Note: Higher 3D settings take more system resources and may slow down the rendering process significantly.

To adjust the 3D settings:

- 1 Choose **Preferences** from the **HGTV Home Design** menu.
- 2 In the *Preferences* dialog box, click the **3D Settings** tab.



- 3 To adjust how HGTV Home Design, smooths the edges in 3D view, drag the **Full Scene Anti-Aliasing** slider. (The default value is **Full**.)
- 4 To adjust the filtering used for rendering textures, drag the **Textures Filtering** slider to a different filter. (The default filter is **Trilinear**.)

Note: *In general, do not set this to **None** because textures are used in most 3D models.*

- 5 To adjust the amount of detail in reflections, drag the **Reflections Quality** slider. (The default value is a mid-range value.)
- 6 To have HGTV Home Design turn off reflections, shadows and lights while you are walking around in 3D, select the **Decrease Quality when Moving** checkbox. (If lights and shadows are already turned off, then nothing changes when you walk in the 3D view.)
To maintain the same quality, clear the checkbox.
- 7 If you selected the **Decrease Quality when Moving** checkbox, then specify which lighting elements to turn off.
- 8 To adjust how shadows are rendered select either **Stencil Shadows** or **Shadow Maps**. (**Stencil Shadows** is the default.)

Note: *The **Stencil Shadows** method is more accurate. The **Shadow Maps** setting gives less sharp shadows.*

- 9 To limit the number of possible light sources (including the sun and moon), select a different value from the **Shadow Casting Lights** pop-up menu. (The default value is **Unlimited**.)

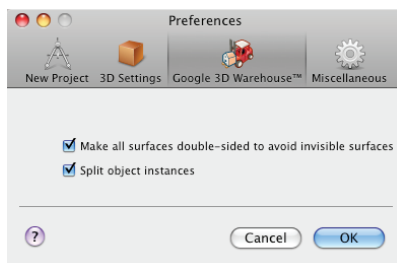
Note: *At smaller numbers, rendering is faster. But, if the number of light sources is too small, you may get an unrealistic picture because you cannot see shadows that normally exist.*

- 10 Click **OK**.
- 11 Choose **Quit** from the **HGTV Home Design** menu and restart the program.

If you plan to import Google SketchUp objects, you may need to change settings on the Google 3D Warehouse™ tab.

To control how to import Google SketchUp objects:

- 1 Choose **Preferences** from the **HGTV Home Design** menu.
- 2 In the *Preferences* dialog box, click the **Google 3D Warehouse™** tab.



- 3 To not have invisible surfaces, select the **Make all surfaces double-sided to avoid invisible surfaces** checkbox. Alternatively, clear this checkbox to maintain any invisible surfaces.
- 4 To have the separate components of a complex object available, select the **Split object instances** checkbox. To keep objects as single objects, clear this checkbox.
- 5 Click **OK**.

Using Rulers, Guidelines and the Grid

With HGTV Home Design you can use rulers, guidelines or a grid to help you align objects in your projects when in the 2D view.

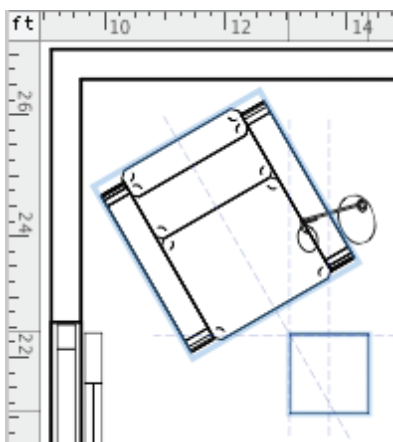
Using the Rulers

You can show or hide rulers in the workspace by choosing **Show Rulers** on the **View** menu. (Cmd-R)

Note: *Showing and hiding rulers affects the Information bar, too.*

The rulers' measurement system depends on the units specified in the **Measurement Units** pop-up menu on the **New Project** tab of the *Preferences* dialog box, but you can change the measurement system for a specific project on the **Measurement** tab of the *Project Setup* dialog box.

As you move objects in the floor plan, rulerlines can help you position objects. If you choose **Show Rulerlines** on the **View** menu, short lines appear in both rulers as you move objects.



Working with Guidelines

Guidelines help you to align objects in the floor plan. You may want to add guidelines to the layout before drawing and placing objects. The guidelines do not appear on the printout or when you export an image of the floor plan.

To add a guideline:

- Place the pointer over the ruler, click the ruler and then drag to place the guide into the drawing.
- Choose **Horizontal Guide** or **Vertical Guide** from the **Insert** menu and then drag the guide to place it in the correct location.

To select a guideline, click it.

To move a guideline, drag it.

To remove a guideline, select it and press the **Delete** key.

Like other objects, guides appear in the Project Tree and you can find them in the **Auxiliary Objects** group. If you plan to add multiple guidelines, you may want to rename each in the Project Tree by its location. To prevent yourself from accidentally moving a guide, you can click its **lock** icon in the Project Tree.

Guidelines have a shortcut menu for quick access to commands — in particular, for deleting, locking, and showing or hiding a guideline.

About Smart Guides

HGTV Home Design provides smart guides, which are temporary guides that appear when you move objects and when you draw walls, floors or ceilings.

- To show or hide smart guides, choose **Show Smart Guidelines** from the **View** menu.

Using the Layout Grid

In addition to layout guides and smart guides, you can use the layout grid when arranging objects in the 2D layout.

- To show or hide the grid, choose **Show Grid** from the **View** menu.

Grid spacing depends upon the measurement units used for rulers and to the layout scale, which you can change in the *Preferences* dialog box on the **New Project** tab. HGTV Home Design changes the grid spacing automatically when you change the scale of the 2D view.

Only layout guidelines can snap to the grid. Objects do not snap to the grid; therefore, you must set up guidelines along a grid line to be able to snap objects to the grid.

To turn the snap feature on:

- 1 Choose **Preferences** from the **HGTV Home Design** menu.
- 2 In the *Preferences* dialog box, if necessary click the **Miscellaneous** tab.
- 3 To turn the snapping feature on in the 2D view, select the **Snap Sensitivity on 2D Plan** checkbox and then specify a distance in pixels.
To turn off 2D snapping, clear this checkbox.
- 4 Click **OK**.

To align objects to grid lines when ‘snapping’ is on:

- 1 Add a guide to the project.
- 2 Move the guide to snap it to the grid.
- 3 If necessary, to lock the position of the guide, in the Project Tree click the **lock** icon for that guide in the Auxiliary Object category.
- 4 Align the object(s) to the guideline.


Changing Your Workspace View

You can work with your projects in two different views: 2D view or 3D view. Additionally, you can zoom in or out of the workspace, show or hide various elements that can help you develop your projects, or view a specific storey in a project.


Switching Between the 2D and 3D Views

You use the 2D view for drawing floor plans and use the 3D view to see the objects in a more realistic representation. You can add objects in either view, but you apply materials and lighting effects in the 3D view.

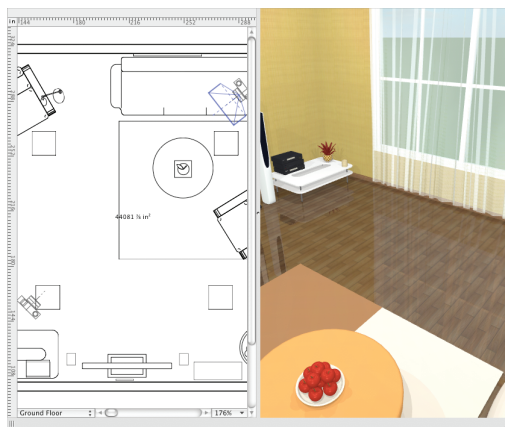
To view the floor plan:

- Click the **2D View** button on the View toolbar. 
- Choose **Toggle 2D/3D View** in the **View** menu.

To see the 3D representation of the floor plan:

- Click the **3D View** button on the View toolbar. 
- Choose **Toggle 2D/3D View** in the **View** menu.

If you wish, you can view both the 2D and 3D views at the same time. To do this, click the **Split Mode** button on the View toolbar.




Split Mode showing both 2D and 3D views

Zooming In and Out of the Workspace


While you're developing your interior design in the 2D view, you may need to see more details or fewer details. To do so, you can zoom in and out of the workspace.

Note: *To zoom into or out of your project in 3D view, you ‘walk’ around the project.*

To see more details of the floor plan:

- Click the **Zoom In** button on the 2D toolbar and then click the workspace. (You may need to click the arrow and choose **Zoom In** if the **Zoom In** button isn’t showing.) 
- Choose **Zoom In** on the **View** menu. (Cmd-+)
- Choose **Zoom** ➤ **higher zoom percentage** from the **View** menu.
- Click the **Zoom arrow** in the bottom-right corner of the workspace and select a **higher zoom percentage**.

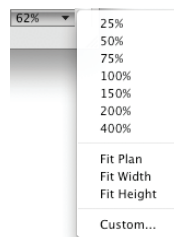
To see fewer details of the floor plan:

- Click the **Zoom Out** button on the 2D toolbar and then click the workspace. (You may need to click the arrow and choose **Zoom Out** if the **Zoom Out** button isn’t showing.) 
- Choose **Zoom Out** on the **View** menu. (Cmd-+)
- Choose **Zoom** ➤ **a lower zoom percentage** from the **View** menu.
- Click the **Zoom arrow** in the bottom-right corner of the workspace and select a **lower zoom percentage**.

After using a Zoom tool, click another button on the 2D toolbar (such as the **Selection** button) to no longer have the Zoom tool active.

On the **View** menu you can also force the view to a certain aspect of the plan with the **Actual Size** command or commands on the **Zoom** submenu: **Fit Plan**, **Fit Width** and **Fit Height**.

The **Zoom** submenu choices are also available on the **Zoom** list in the bottom-right corner of the workspace. To zoom in or out to a specific percentage, click the **Zoom arrow** in the bottom-right corner and select **Custom**. Then type the specific zoom percentage in the **Zoom** box.



Navigating in the 3D View

In the 3D view you don't have zoom controls. You navigate through the space in different ways. HGTV Home Design provides four ways to move around the 3D view:

- Use the pointer and mouse in Walk mode.
- Use the keyboard.
- Use the Walk Control.
- Use the Look Around and Fly Around tools.

Note: When you walk through a 3D view, you are also setting the camera for taking pictures. See Chapter 14: Taking Pictures and Making Movies for details.

The walking speed depends on the rendering quality. At a higher quality setting, the movement becomes slower. In general, use a lower rendering quality for walking around, but set the maximum quality for when you take a picture of the 3D view. You set the rendering quality with the **3D View ► Rendering Quality** submenu commands on the **View** menu.

When navigating in 3D view, you can have HGTV Home Design prevent you from 'colliding' with solid objects. You can click the **Consider Collisions** button on the 3D toolbar or choose **3D View ► Consider Collisions** from the **View** menu. For example, when active, you cannot 'walk through' walls or windows. You may have to turn off the **Consider Collisions** command to be able to go inside and out of a structure.

Using Walk mode

In Walk mode, the pointer becomes a large double-headed arrow that shows the walk direction, a curved arrow to indicate a rotational direction, or other indicators. To change the direction of the motion, move the pointer to a different area of the 3D view. To walk in the indicated direction, press the left mouse button.



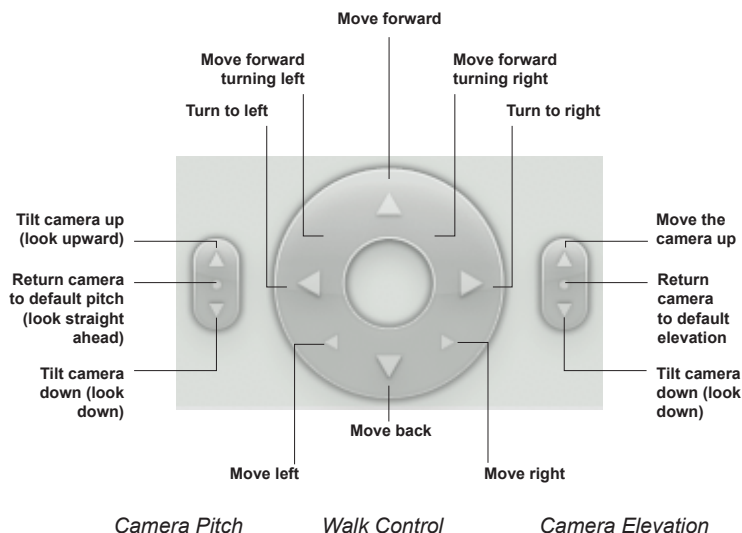
Using the keyboard

You can also use keys on the keyboard to navigate through the 3D view in any mode. For example, you can use the arrow keys to move forward, back, right or left. For details on what the various keys do, see HGTV Home Design Help.

Using the Walk Control

In Automatic mode, a semi-transparent Walk Control appears at the bottom of the 3D view when you move the pointer over that area. You can specify that the Walk Control always appears or is always hidden in the 3D view. To specify a mode, choose a command on the **Display 3D Walk Control** submenu on the **View** menu: **Never**, **Automatically** or **Always**.

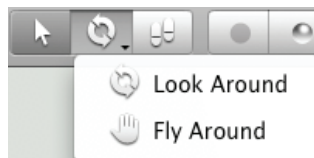
Note: *The Walk Control does not show when the program is in Walk mode.*



You can double-click the **Camera Pitch** or **Camera Elevation** control to reset the camera.

Using the Look Around and Fly Around tools

In the Look Around and Fly Around modes you use the mouse to change the direction or fly around a fixed point. You activate the Look Around and Fly Around tools from either the 3D toolbar or the **3D View** submenu on the **View** menu.



In the Look Around mode, your location is fixed, and you change the view direction. In the Fly Around mode, you can fly around the point located in the center of the 3D view.



*Look
Around
tool*



*Fly
Around
tool*

To change the view direction in both Look Around and Fly Around modes, drag the pointer. The pointer changes when in Fly Around mode.



Showing or Hiding Workspace Elements

You can customize your workspace to show or hide certain elements by choosing commands in the **View** or **Window** menu. If there is a checkmark next to a command, the element appears in the workspace.

- To show or hide rulers, choose **Show Rulers** from the **View** menu. (This command also shows or hides the Information bar.)
- To show or hide rulerlines (if rulers appear in the workspace), choose **Show Rulerlines** from the **View** menu.
- To show or hide a label showing the area of the floor plan, choose **Show Floor Labels** from the **View** menu.
- To show or hide the viewing angle and direction indicator on a camera, choose **Show 3D Viewpoint** from the **View** menu.
- To show or hide temporary guides that appear when you draw walls, floors, or ceilings and when you move objects, choose **Show Smart Guidelines** from the **View** menu.
- To show or hide directional compass on the floor plan, choose **Show Compass in 2D** from the **View** menu.

Viewing Different Storeys

With HGTV Home Design you can create two-storey buildings (or two storeys and a loft). If your project has more than one storey, you specify which one to view in the **Storey** pop-up menu at the bottom-left corner of the workspace.

You can choose **Show Storey Above Current** or **Show Storey Below Current** on the **View** menu to see the walls (dimmed) in the other storey.

Creating and Opening Projects

You can create a new project or open an existing project

Creating new projects

To create a new blank project, click **New Project** on the *Welcome* dialog box, click **New Project** in the *Assistant* dialog box or choose **New** from the **File** menu (Cmd-N).

Default settings for a new project correspond to the settings in the *Preferences* dialog box (Cmd-,). You can change these settings for a specific project in the *Project Setup* dialog box. To do so, choose **Project Setup** from the **File** menu.

To create a project from a template, you use the *Assistant* dialog box. To open the *Assistant* dialog box, click **Browse Sample Projects** on the *Welcome* dialog box or choose **New from Assistant** from the **File** menu.

See *Chapter 3: Getting Started* to see a project-creation workflow.

Opening existing projects

After saving a project you can open it to continue working on it.

To open an existing project:

- 1 Choose **Open** from the **File** menu.
or
If the *Assistant* dialog box is open, click **Open Project**.
or
If the *Welcome* dialog box is open, click **Open Saved Projects**.
- 2 In the **Open** dialog box, locate and select the project.
- 3 Click **Open**.

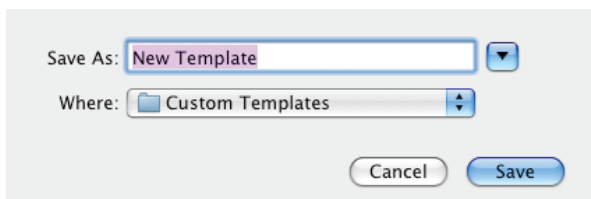
If you've working on a project recently, you can open it directly from the *Assistant* dialog box by selecting **Recent Projects** in the category list on the left and then selecting the project on the right and clicking **OK**. Alternatively, you can choose the name of the project in the **Open Recent** submenu on the **File** menu.

Creating and opening custom templates

You can save your own projects as template files, which you can then select from the *Assistant* dialog box. A template file is a read-only file; therefore, you can open it and HGTV Home Design forces you to save it with a new name or location after you make changes to it.

To create your own template:

- 1 Open the project in the workspace.
- 2 Choose **Save as Template** from the **File** menu.



- 3 In the *Save as Template* dialog box, type a name for the template in the **Save As** box.
- 4 To have this template accessible from the *Assistant* dialog box, make sure it's saved to the *Custom Templates* folder, which is the default folder shown in the dialog box.
- 5 Click **Save**.

Adjusting Project Settings

A newly created project has default settings based on the settings in the **New Project** tab of the *Preferences* dialog box. After you start a new project or open an existing project, you can adjust the project settings in the *Project Setup* dialog box.

To adjust project settings:

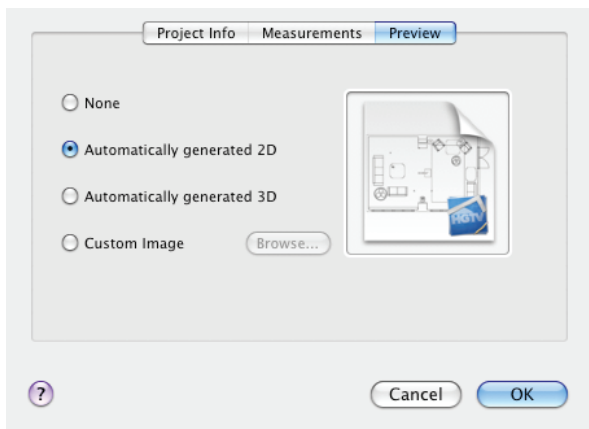
- 1 Choose **Project Setup** from the **File** menu.

The screenshot shows the 'Project Info' tab of a dialog box. It contains three input fields: 'Author' (a single-line text box), 'Copyright' (a single-line text box), and 'Description' (a multi-line text area). At the bottom, there is a help icon (a circle with a question mark), a 'Cancel' button, and an 'OK' button.

- 2 If you want to add information to the document file, type your name, any copyright information and project description on the **Project Info** tab.
- 3 To adjust the default measurement system for this project, click the **Measurements** tab.

The screenshot shows the 'Measurements' tab of the same dialog box. It features a 'Measurement Units' dropdown menu set to 'Inches, Decimal'. Below this is a checkbox labeled 'Suppress Units'. There are two scale options: 'Predefined Scale' (selected with a radio button) and 'Custom Scale' (unselected). The 'Predefined Scale' dropdown is set to '1:50'. The 'Custom Scale' has two empty input boxes separated by a colon. At the bottom, there is a help icon (a circle with a question mark), a 'Cancel' button, and an 'OK' button.

- 4 To specify a different measurement system, select a different one from the **Measurements Units** pop-up menu.
The upper-left corner of the rulers shows the current measurement units.
- 5 To show the measurement units in the 2D view, clear the **Suppress Units** checkbox (for example, 40 ft). To hide the units, select the checkbox (for example, 40).
- 6 To adjust the project's scale, select **Predefined Scale** and then specify a scale from the pop-up menu.
To apply scaling that is not available in the pop-up menu, select **Custom Scale** and type the ratio in the boxes.
- 7 To adjust the icon for the project's file when viewed in the Finder, click the **Preview** tab. Specify which image to show: **None**, **Automatically generated 2D**, **Automatically generated 3D** or **Custom image**. If you select **Custom image**, click **Browse...** and select the image and click **OK**.



- 8 Click **OK**.

Adjusting a Project's Environment

HGTV Home Design has a special feature for setting up the geographical orientation of the building, the time of day and cloudiness. These settings affect the illumination intensity in the 3D view.

To adjust the environment for your project, change the settings on the *Environment* panel.

To show the *Environment* panel, choose **Show Environment** from the **Window** menu (Cmd-E).

Daytime & Cloudiness

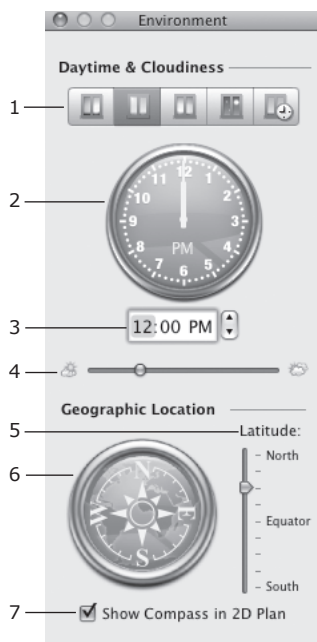
Four buttons (1) set a predefined time: **Morning** (6 am), **Day** (noon), **Evening** (6 pm) and **Night** (midnight). Click the last button to set your own time by adjusting the numeric time (3) or by dragging the hour hand on the clock (2).

To vary the cloudiness, use the slider bar (4).

Geographic Location

To change the geographic orientation of the floor plan, rotate the compass (6) by dragging. If you select the **Show Compass in 2D Plan** checkbox (7), the compass icon reflects the specified direction.

Drag the **Latitude** slider (5) to indicate how high the sun would be at any particular time of day.



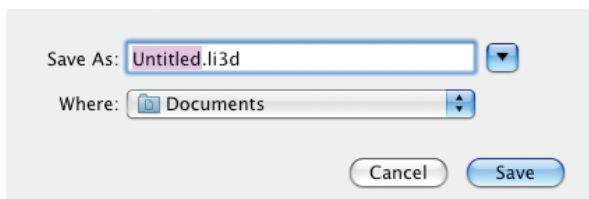
Saving Projects

HGTV Home Design saves information about all the materials and objects used in the design in the project file. This guarantees that your project will look the same on other computers with HGTV Home Design installed.

To save changes as you work on a project, choose **Save** from the **File** menu. HGTV Home Design updates the existing project file.

To save your project:

- 1 Choose **Save** from the **File** menu. (Cmd-S)
If you've saved this project before, you're finished.



- 2 If you haven't saved this project before, in the *Save As* dialog box, type a name for the project file in the **Save As** box.
- 3 Specify where to save the project file.
- 4 Click **Save**.

At times you may want to keep 'older' versions of a project and save the newer versions with a different name (for example, adding the date). To save an existing project file in a different location or with a different name, choose **Save As** from the **File** menu.

To be able to view the project on a computer where HGTV Home Design is not installed, save the 2D and 3D views as graphic files. For more information, see *Chapter 13: Printing and Exporting Projects*.

WORKING WITH OBJECTS

In HGTV Home Design objects have different behavior depending on their type, but there are many functions that are common to all objects. This chapter presents information that is available to the various objects.

It also has information about auxiliary objects, which are not design objects (such as walls), but by using these objects you can create a more professional-looking floor plan.

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Overview of HGTV Home Design Objects

In the 2D and the 3D views you work with several types of objects.

Design Objects

- Walls
- Ceilings and floors
- Windows, doors and openings
- Columns
- Furnishing: furniture, lamps, appliances and decorative objects
- Staircases

Supportive (or auxiliary) objects:

- Cameras
- Dimension lines
- Text annotations
- Images

The object type is the most important property of an object. Objects have different behavior depending on their type. For example, separate wall objects can merge, thus making a longer wall, but furniture objects cannot merge. Depending on the type of the selected object, HGTV Home Design activates (or deactivates) some tools or settings in the Inspector, showing only the functions available for the selected object.

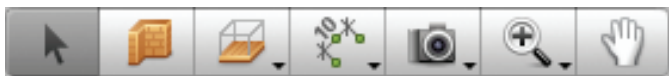
Design objects have two representations in a design: one for the 2D layout and another one for the 3D view. Supportive objects don't appear in the 3D view, but cameras are used in the 3D view for taking pictures and creating movies.

Note: *Roofs are a special type of object. See Chapter 9: Working with Roofs for details.*

Adding Objects

There are two ways to add objects to your floor plan, which depend on the type of object you're adding:

- For adding walls, ceilings, floors and cameras, you use the tools on the 2D toolbar.



- For all other objects, insert the objects from the object library or import them into the project.

For details on adding specific types of objects, see the relevant chapter for that object type.

Selecting Objects

To work with an object, you have to select it. If you have another tool active, you may need to click the **Selection** button on the toolbar to be able to select an object.



To select an object, click it in the 2D or 3D view.

Note: *If you select an object in the 2D layout, it remains selected when you switch to the 3D view, and vice versa.*

Objects in 2D

- All selected objects show a light blue frame (or outline).
- Selected walls, floors, ceilings, text boxes and dimension lines have handles (shown as green dots). You use these handles for resizing the object. Selected cameras also have handles for you to move the camera with or without turning it.
- For walls, doors, windows and niches you can select one of the two sides, and that side changes to a green color. To select a specific side, click it in the 2D or 3D view. By selecting a side

you can perform side-specific operations (such as changing materials and modifying mouldings). (You can select both sides of an object at the same time.)

Objects in 3D

- In the 3D view, the selected object has by a white boundary frame around it. You can usually select an object in the 3D view by clicking it.

To prevent yourself from accidentally moving or modifying an object, you can lock it in the Project Tree. You cannot select a locked object in the design area by clicking it. You must unlock the object to be able to select it by clicking. Alternatively, you can select it in the Project Tree even if it is locked.

Using the Project Tree to Select Objects

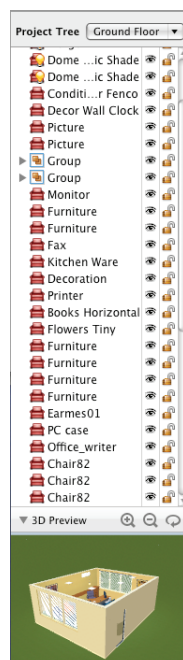
HGTV Home Design lists all objects added to your project in the Project Tree, found in the *Library* pane.

To open the Project Tree, choose **Project Tree** from the **Window** menu or click the **Project Tree** button on the *Library* pane's toolbar.

Having the Project Tree showing gives you two ways to access an object: you can select the object by clicking it in the currently open view or by clicking it in the Project Tree. Sometimes the only way to select an object is to use the Project Tree.

Using the Project Tree helps you:

- Select several objects, especially if they are of the same type.
- Select locked objects. (This is the only way to select them.)
- Select an invisible object.



- Select an object that is too close to or hidden by other objects, where it is difficult to click.

For more information about the Project Tree, see *Chapter 4: Using HGTV Home Design*.

Deleting Objects

There are two ways to delete objects:

- To remove an object completely, select it and press the **Delete** key.
- To be able to paste the object elsewhere (such as in another project), select the object and choose **Cut** from the **Edit** (or the object's shortcut) menu.

Note: If you press the **Delete** key, you can re-instate the object by choosing **Undo** from the **Edit** menu.

Moving Objects

To move an object, you first have to select it.

To move a selected object, use the arrow keys or drag it.

Notes:

You cannot move locked objects. You can lock or unlock an object in the Project Tree.

Some objects may have a Glue by property specified, which would limit how you can move the object.

Modifying Objects

Most object properties are available in the Inspector. The Inspector shows object-dependent options: the tools and settings that you can apply to the selected object.

You can also choose **Type & Representation** from the **Edit** (or shortcut) menu to view the *Type & Representation* dialog box for the currently selected object. In this dialog box, you can flip the object, change its orientation and dimensions, and make other object-specific changes. When you make a change to an object in this dialog box, HGTV Home Design creates a new object.

For more information, see the chapters that focus on the various types of objects.

Changing Materials

When you add an object to the project, it has default materials. You can apply new materials from the library of materials on the **Materials** tab of the Inspector.

To learn how to apply a new material to an added object, see *Chapter 11: Applying Materials*.

Adjusting Object Properties in 2D

With the settings on the **2D Properties** tab of the Inspector you can adjust the appearance of objects in the 2D view. You can use these settings to adjust walls, floors, ceilings and auxiliary objects (for instance, text annotation or an imported image).

To open the tab directly, choose **Inspector** ► **2D Properties** from the **Window** menu. If the Inspector is already open, click the **2D Properties** tab.

The **Stroked** checkbox affects the object's outline. When selected, you can specify the color for the outline from the Mac OS X *Colors* palette. Supported objects include: walls, floors, ceilings, and images.

The **Filled** checkbox affects an object's fill color. When selected, you can specify the color for the fill. Supported objects include: walls, floors and ceilings.

The **Pattern Fill** checkbox is useful to mark off walls, floors or ceilings when different building materials are used for them or their parts. When selected, you can specify a **Pattern Type** and a **Pattern Color**.

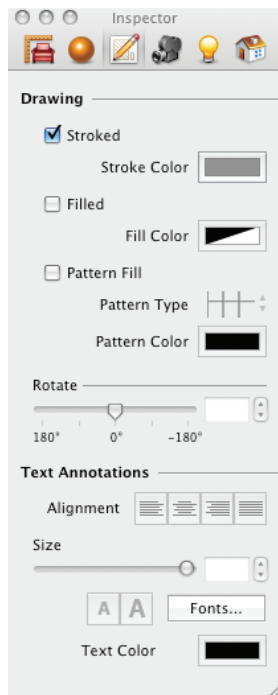
Use the **Rotate** slider to rotate cameras, images, measurements and text annotations.

Click an Alignment button (**Left**, **Center**, **Right** or **Justified**) to align text inside a selected text object.

To change the size of text in text annotations and measurements, drag the **Size** slider, type a point size in the **Size** box, click the **Size** arrows, or click the **Font Bigger** or **Font Smaller** buttons.

Click **Fonts** to open the Mac OS X *Fonts* palette for changing the font in text annotations and measurements.

Click the **Text Color** box to change the color of text in text annotations and measurements.



Adjusting Type and Representation Properties

In the *Type & Representation* dialog box you can change default object properties. It opens when you import an object, when you choose **Type & Representation** from the **Edit** (or shortcut) menu, or click **Type & Representation** on the **Object Properties** tab of the Inspector.



The settings in the *Type & Representation* dialog box change the currently selected object to create a new model. Other objects of the same type in your project remain unchanged.

By default, HGTV Home Design uses the same model for all copies of each object in the project. If you modify one object, HGTV Home Design creates an additional model for the changed object. So, by using the *Type & Representation* dialog box, you increase the total number of object models in the project, which may affect the program's performance and increases the file size for the project.

Controlling an object's preview

In the *Type & Representation* dialog box, the 3D Representation box displays a preview of the 3D model. Changes in the preview area do not affect the object. They change the preview picture only.

To change the size of the preview picture, click the zoom buttons above the preview.

To rotate the 3D model in the preview, drag the image in the preview area

To restore the default orientation (angle) and magnification of the model in the preview, double-click the preview image.

Adjusting the object type

The **Object type** is the most important object property. It determines the behavior of the object. You can set it to **Furnishing**, **Window**, **Door** and **Stairs**. You can insert windows and doors into walls, but you cannot insert furniture into walls. Any object that is not a door or a window, should be specified as **Furnishing** unless it is a staircase.

Rotating an object's representation

If you rotate an object in the *Type & Representation* dialog box, the object changes its default orientation when placed in a layout.

You may have to change the orientation of an imported object if it was imported upside-down or if you insert a door or window across a wall.

To rotate an object, use the 3D Representation rotation sliders.

If you rotate an object in this dialog box, it is best to make sure that the **Change Object Origin** to checkbox is selected for HGTV Home Design to update the object's origin. Keep the other checkboxes (such as **Top** or **Bottom**) unchanged.

Flipping an object

With 3D flipping you can make several objects out of a single, non-symmetric model. For example, by applying front-to-back and left-to-right flipping, you can create three new doors from a single door model. This is especially helpful when the door model has a handle on one side but you need a handle on the other side.

To flip an object, click the corresponding **3D Flip** button.

By clicking a 2D flipping button (**Flip Horizontally** or **Flip Vertically**), HGTV Home Design creates a mirrored or flipped 2D representation based on the current representation. Click these buttons to adjust the

orientation of an image for the 2D view to match with the 3D object. For example, after flipping a door left to right, you should flip its image on the floor plan, too.

Note: *The 2D and 3D flip operations work independently for more flexibility. Make sure the 2D representation matches the 3D object.*

Changing an object's origin

The object's origin is a point on the object's surface that is used by HGTV Home Design to define the object's location in the 2D layout and in the 3D space. By default, the most optimal point on the object is used as the origin. For instance, when you rotate an object, it rotates around its origin. So, changing the origin may change the object's behavior.

You use the **Change Object Origin** checkbox to change the origin of an object already added to your project or to specify an origin for the currently imported object. Changing the object's origin affects the current object's copy only. Objects in the built-in library never change.

The default origin is usually set depending on the object type. For furniture it is the center of the bottom; for wall pictures – center of the back surface; for ceiling lamps – the center of the top.

Adjusting an object's default size

Object dimensions determine the size of an object. You can also adjust these values in the Inspector.

Changing the image for the floor plan

The **2D representation** gallery shows the available representations for the current object in the 2D view, with the current representation selected.

To select a 2D representation in the gallery, click it.

To use a custom image, click the **Custom Image** button. In the *Select custom image* dialog box, locate and select a graphic file. Then click **OK**.

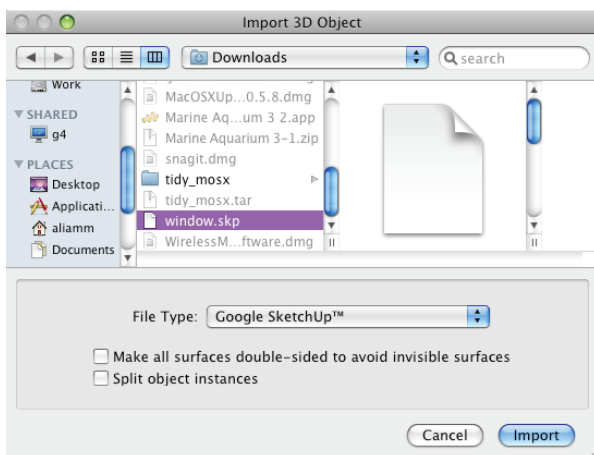
Importing Objects

The built-in object library may not contain all objects necessary for developing your project. With HGTV Home Design you can import objects from outside the program, which are in the following formats:

- 3DS format (created in the Autodesk® 3ds Max® software)
- Google SketchUp format
- Ogre XML format

To import an object:

- 1 Choose **Import 3D Object** from the **File** menu.



- 2 Specify the type of file in the **File Type** pop-up menu.
- 3 Locate and select the file for that object.
- 4 If the object is a Google SketchUp object or a 3D Studio object, specify how to import the file:
 - **Make all surfaces double-sided to avoid invisible surfaces** – select to adjust the surfaces as needed to be able to easily work with all surfaces.
 - **Split object instances** – select to split a compound object into separate objects. (See details in the *Importing Google SketchUp Objects* topic in online help.)

- 5 Click **Import**.
- 6 If the *Open File* dialog box appears, specify the location for the texture file or skip opening textures and use the materials from the built-in library. Click **Open**.
- 7 In the *Type & Representation* dialog box, adjust the settings as needed and click **OK**.
You can change the settings later also

Importing by Dragging

In HGTV Home Design you can import Google SketchUp models by dragging them into a HGTV Home Design project.

If the imported object is a door or a window, you should specify this in the *Type & Representation* dialog box. You can also change the orientation of an object and its icon on the floor plan. See *Adjusting Type and Representation Properties* in this chapter.

Importing from Google 3D Warehouse

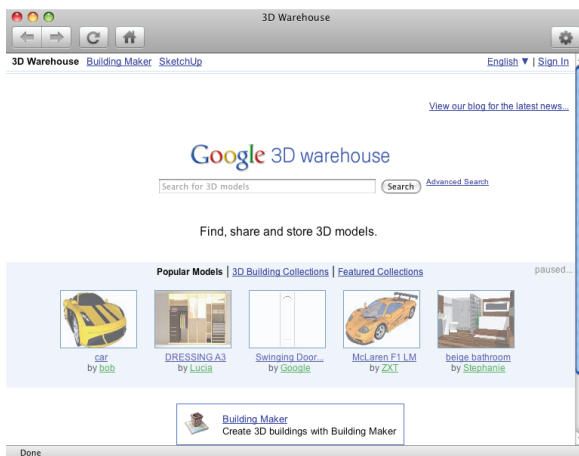
HGTV Home Design integrates with Google 3D Warehouse for you to directly import files if you have an active Internet connection.

To import a 3D model directly from Google 3D Warehouse:

- 1 Click the **Google 3D Warehouse** button in the toolbar or choose **Google 3D Warehouse™** from the **Window** menu.



The Google 3D Warehouse page opens in a browser window. This simplified browser is similar to a standard browser. For information about this special browser see the *Importing Google SketchUp Objects* topic in online help.



- 2 Find the model you want to import. (You can use thumbnails and links in the browser to navigate to a file, or you can use the search box.)
- 3 Once you have found a model to use in your project, open its page.
- 4 Click the **Download Model** button on the object's page.
The button may also be called **Download to HGTV Home Design**, **Get Model** or **Download to Google SketchUp**.

The duration of the download depends on the object's file size and on the speed of your Internet connection. Until an object is completely downloaded, a replacement image appears in the 2D and 3D views

You can set up the import from Google 3D Warehouse by using the **Make all surfaces double-sided to avoid invisible surfaces** and **Split object instances** checkboxes. You can change the default condition of these checkboxes in the **Google 3D Warehouse™** tab of the *Preferences* dialog box. Click the **Import Settings** button in the browser window's toolbar for quick access to this tab in the *Preferences* dialog box. For details on these import options, see the *Importing Google SketchUp Objects* topic in online help.

To change the default properties of the imported object, use the *Type & Representation* dialog box.

Aligning and Distributing Objects

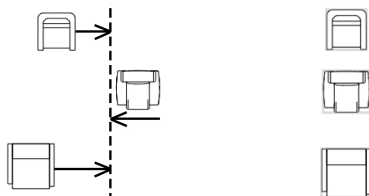
In HGTV Home Design, you can arrange objects in the layout using the **Align** and **Distribute** submenu commands in the **Arrange** menu.

Aligning Objects

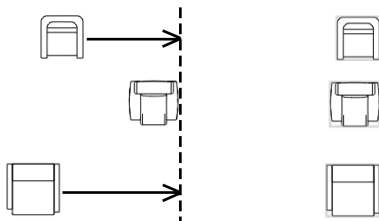
In HGTV Home Design, you can arrange objects in the layout using the **Align** submenu commands located in the **Arrange** menu.

You can align objects by their centers or edges. The **Align Centers Horizontally** and **Align Centers Vertically** commands align the centers of the selected objects along a vertical or horizontal straight line. When you apply the **Align Edges** commands, objects are aligned to the outermost object.

Align Centers Horizontally:



Align Right Edges:



Distributing Objects

If you choose **Distribute** ► **Spacing Horizontally** or **Distribute** ► **Spacing Vertically** from the **Arrange** menu, HGTV Home Design makes the distance between edges of the selected objects equal.

If you choose **Distribute** ► **Centers Horizontally** or **Distribute** ► **Centers Vertically** from the **Arrange** menu, HGTV Home Design makes the distance between centers of the selected objects equal.

By using the **Distribute** submenu commands you can quickly position multiple objects such as windows and panels after adding them in.

For example, if you need to insert four windows in a wall and then position them with the same distance between each window, the quickest way to do this is to use a command on the **Distribute** submenu.

To distribute windows:

- 1 Insert all windows in the wall.
- 2 Place the left and right windows in the proper locations.
3. To move the other windows automatically, choose **Distribute** ► **Openings & Panels Spacing** from the **Arrange** menu.

Unlike furniture, openings and panels have separate commands in the **Distribute** submenu because they should stay in (or with) the wall when moved. For this, both the coordinates (in the 2D layout) may be changed if the wall is not parallel to a ruler. With other objects, when distributed, HGTV Home Design only changes one coordinate.

Grouping and Ungrouping Objects

You can combine several objects into a group to treat them as a single object. For example, you might group objects laying on a table with the table to be able to move all of them together.

To group objects together:

- 1 Select all the objects to group together.
- 2 Choose **Group** from the **Arrange** menu (Cmd-G).

To ungroup a grouped object:

- 1 Select the grouped object.
- 2 Choose **Ungroup** from the **Arrange** menu (Cmd-Shift-G).

In the Project Tree a group of objects appears as a single item.

You can also create groups of grouped objects (nested groups). You can group either separate objects or combine a group with another group. When you ungroup the bigger group, objects in a nested group remain grouped.

For example, you can group a lamp with a table. Then group the lamp and table object with a chair. After ungrouping the overall group, the table with the lamp remain grouped and the chair is separate.

You can also merge several selected objects into one object by choosing **Merge into Single Object** from the **Arrange** menu.

Accessing Objects from the Object Library

HGTV Home Design has a library of objects (3D models of furniture, doors and so on). In your projects, you can use this built-in library or import more objects. You can add imported items into the library to use in other projects. The library is located in the *Library* pane.

The *Library* pane is a part of the main program window. To open the pane (if it is hidden), use the **Toggle Library** toolbar button (the double-headed arrow) or choose **Toggle Library** from the **Window** menu.

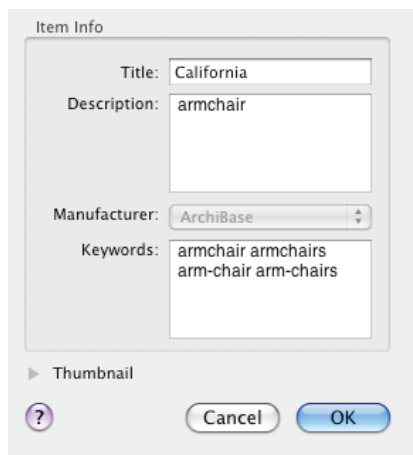
The *Library* pane has three different sections, which you show by clicking a button on the toolbar or by choosing a **Library** submenu command on the **Window** menu:

- The **Building Elements** section of the library of objects includes doors, windows, niches, openings, columns, staircases and 3D shapes.
- The **Furnishing** section of the library of objects includes furniture, lamps, fireplaces and other objects.
- The **Project Tree** lists all the objects in the current project.

Accessing Object Information

The *Item Info* dialog box shows information about objects in the library.

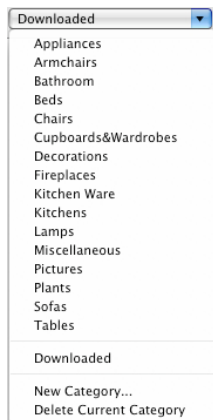
To open the dialog box, double-click a thumbnail in the object library.



You can modify the displayed data if you have selected a custom object (an object that you've added to the library). When you add a new object to the library, HGTV Home Design opens the *Item Info* dialog box for you to update the information.

You cannot change the information of objects supplied with the program.

Managing Objects in the Library



You can add and remove object categories or add and remove custom objects from the library.

Adjusting object categories

You can add new object categories into the library. When you do, the new category appears in both the Furnishing and Building Elements sections of the object library beneath the provided categories.

To add new object categories into the library:

- 1 Open the pop-up menu at the top of the *Library* pane and choose **New Category**.
- 2 In the *New Category* dialog box, type a name for the category in the **Category Name** box.
Do not use spaces in the category's name. If you do, HGTV Home Design replaces them with the underline character.
- 3 Click **OK**.

To delete a custom object category:

- 1 In the *Library* pane, specify the custom category from the pop-up menu at the top of the *Library* pane.
- 2 Then choose **Delete Current Category** from the pop-up menu.
- 3 When the warning message appears, click **Delete**.

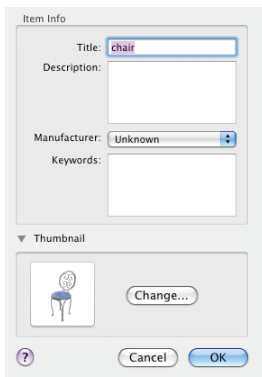
Note: You cannot delete the provided categories and objects, but you can uninstall them. See Chapter 2: Installing HGTV Home Design for information.

Adding and removing objects

You can import Google SketchUp (.skp), Ogre XML (.xml) and 3D Studio (.3ds) objects into your projects as 3D objects. After you import an object into your project, you can add it to the library. It is best to add new objects to a custom category.

To add an object to the library:

- 1 Open the category in the library where you would like to store the object.
- 2 Move the pointer over the object in the 2D view.
- 3 Press the **Option** key as you drag the object into the library.



- 4 In the *Item Info* dialog box, type a name for the object in the **Title** box.
- 5 If you wish, type a description and keywords in the **Description** and **Keywords** boxes, but you can leave these blank.
If you plan to add a lot of objects to the library, type information into these boxes to simplify finding the required object later.
Separate keywords with spaces
- 6 If you wish, specify a manufacturer in the **Manufacturer** pop-up menu.
- 7 If necessary, to change the 2D thumbnail, click the **Thumbnail** triangle. Then click **Change**. In the *Edit Thumbnail* dialog box, click the **Zoom In** or **Zoom Out** button as needed and then click **OK**.
- 8 Click **OK**.

Later, you can open the *Item Info* dialog by double-clicking the object's thumbnail in the library.

To delete an object that you've added, right-click (or Control-click) the object in the library and choose **Delete**.

Note: *You cannot delete a provided object.*

Copying and moving objects

You can copy and move objects between categories.

To create a copy of an object in the library:

- 1 Right-click (or Control-click) the object in the *Library* pane and choose **Copy**.
- 2 Open the destination category.
- 3 Right-click (or Control-click) in blank area of that category's thumbnail list and choose **Paste**.

To move an object to another location in the library:

- 1 Right-click (or Control-click) the object in the *Library* pane and choose **Cut**.
- 2 Open the destination category.
- 3 Right-click (or Control-click) in blank area of that category's thumbnail list and choose **Paste**.

Replacing an object in the library

You can only replace objects in custom categories.

To replace an object in the library with an object selected in the project:

- 1 Select an object in your project.
- 2 Right-click (or Control-click) an object in the library and choose **Substitute with Selection in Project**.

Changing the order of objects

You can re-order objects only in custom categories.

To change the order of an object within a custom category, drag the object's thumbnail to a new position.

Working with Auxiliary Objects

Auxiliary objects are objects that help you create a project. They appear on the floor plan but aren't visible in the 3D view. These auxiliary objects include: text annotations, images and measurement tools.

HGTV Home Design also provides guide lines, grids and cameras. See *Chapter 4: Using HGTV Home Design* for information about guidelines and grids. See *Chapter 14: Taking Pictures and Making Movies* for information about cameras.

In the Project Tree, all supportive objects appear in the **Auxiliary Objects** group.

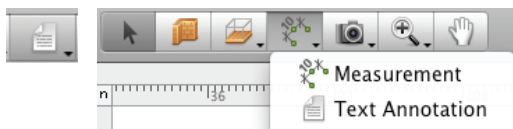
Adding Text Annotations

You use the **Text Annotation** tool to add text comments to the 2D drawing.



To add a text annotation:

- 1 Choose **Text Annotation** from the **Insert** menu.
Alternatively, click the **Text Annotation** button on the toolbar.
(If the **Text Annotation** button is not available, click the **Measurement** arrow and then click **Text Annotation**.)



- 2 To create a default text object, click once in the floor plan.
or
To set the size for the text object, drag to create a rectangle.
- 3 With the insertion point in the text object, type the text for this text object.
- 4 To format text, select the text and then change the settings on the **2D Properties** tab of the Inspector.

After adding a text annotation, the tool is still active for you to create other text annotations. Click the **Selection** button on the toolbar to no longer add text annotations.

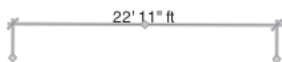
You can move and resize text annotation objects in the same manner as other objects. Each text annotation in the project appears as a separate item in the Project Tree in the **Auxiliary Objects** group. In the Project Tree, you can show and hide or lock and unlock these objects.

To edit an existing text annotation, double-click it.

Note: *There is another type of text box in HGTV Home Design: text labels. This is a part of a “floor” object.*

Adding Dimension Lines

You can measure and show the distance between two points in your layout.



To add a dimension line:

- 1 Choose **Measurement** from the **Insert** menu.
Alternatively, click the **Measurement** button on the toolbar. (If the **Text Annotation** button shows on the toolbar, click the arrow and choose **Measurement**.)



- 2 Click a starting point in the layout.
- 3 Click the ending point in the layout.
- 4 After clicking to set the end point, move the pointer as needed to extend the bracketing lines.
- 5 Click again to set the length of the bracketing lines.

The measurement object, when selected, has three handles. Drag the middle handle to adjust the distance between the measurement line and the measured object. Drag the handles on the ends to change the distance to be measured.

The measurement units are the same as the rulers. You can change the measurement units in the *Project Setup* dialog box on the **Measurements**

tab. To hide the units and only show the values, select the **Suppress Units** checkbox on the **Measurements** tab.

If you create the measurement object by clicking the handles of the measured object (or near to the handles), the measurement object is 'tied' to the object it measures. For example, if you measure a wall to show its length and you resize the wall's length, the measurement object changes, also. If you either create the measurement object by clicking away from the object's handles or move the measurement object's endpoints away from the measured object's handles, the object and the measurement object are separate.

To change the font, size or color of text for a dimension line, use the **2D Properties** tab of the Inspector.

Adding Images to the Floor Plan

Generally, you insert images in the 2D view. This is particularly useful when you already have a floor plan saved as an image file or drawn on paper that you can scan. With HGTV Home Design you can insert standard image file formats (such as GIF, JPEG, PNG, PSD and TIFF).

To insert an image:

- 1 Choose **Image** from the **Insert** menu.
- 2 In the *Open* dialog box, locate and select the image to insert.
- 3 Click **Open**.

After inserting an image, you can move it within the design, rotate it, resize it or adjust its transparency level with the Inspector.

Adding Images as Materials

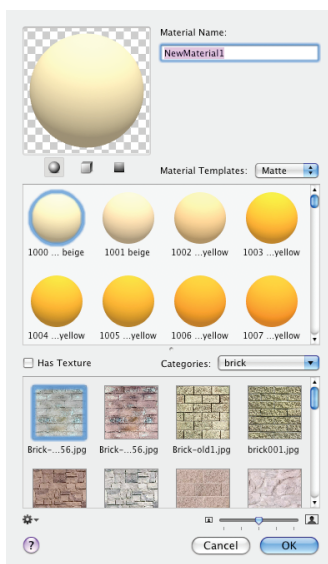
To display an image in 3D, you apply it to an object as a material. You can insert standard image file formats (such as AI, GIF, JPEG, PNG, PSD and TIFF) to use as materials.

To create a new material with an image.

- 1 If necessary, open the Inspector to the **Materials** tab by choosing **Inspector** ► **Materials** from the **View** menu, or if the Inspector is showing, click the **Materials** tab in the Inspector.
- 2 At the bottom of the **Materials** tab, click the **Materials Menu** button at the bottom of the tab and choose **New Material**.



- 3 In the *New Material* dialog box, type a name for the image's material.



- 4 Select a template (such as **Matte**) from the **Material Templates** pop-up menu.
- 5 Select a white material in the **Material** list.

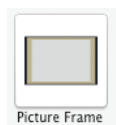
- 6 To apply the image to this material, select the **Has Texture** checkbox.
- 7 Select the material category to add the new material to.
There is a **Pictures** category, but you can specify any category you wish.
- 8 Scroll through the thumbnails in the category list and at the bottom of the list click **Import Custom**.
- 9 In the *Import Texture* dialog box, locate and select the image file.
- 10 Click **Import**.
- 11 In the *New Material* dialog box, click **OK**.

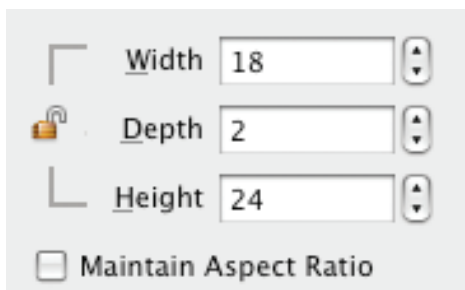
HGTV Home Design creates the new material from the specified image. If the image is too dark, double-click its thumbnail in the Inspector and make the **Ambient Color** light gray or white.

The provided object library has a blank picture frame in the **Furnishing** ➤ **Pictures** category. After creating the material, you add the picture frame object to your project and then apply the image material to it. (You can also use an image file as a material to apply to any object — such as a fabric or pattern.)

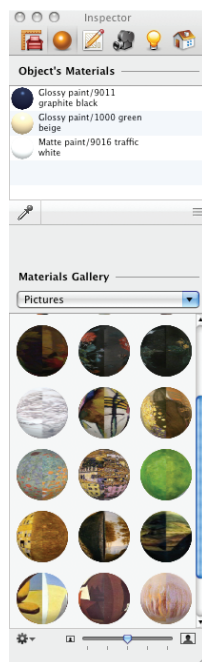
To add a picture frame object:

- 1 Click the **Furnishing** button on the toolbar.
- 2 Specify the **Pictures** category from the pop-up menu.
- 3 Drag the **Picture Frame** object onto a wall in the 3D view.
- 4 If necessary, with the picture frame still selected, choose **Inspector** ➤ **Object Properties** from the **View** menu.
or
If the Inspector is showing, click the **Object Properties** tab in the Inspector.





- 5 Set the picture's proportions to the size of the original image. For example, if the original picture is 18 x 24 inches, if necessary, clear the **Maintain Aspect Ratio** checkbox and set the **Width** to **18** and **Height** to **24**. Then select the **Maintain Aspect Ratio** checkbox again.
- 6 With the picture frame still selected, click the **Materials** tab.
- 7 In the **Object's Materials** list, select the white matte material.
- 8 Specify the category with the image material from the **Materials Gallery** pop-up menu. (For example, if you added the image to the **Pictures** category, select the **Pictures** category in the pop-up menu.)
- 9 Scroll through the thumbnails until you find the image material you added.
- 10 To apply that material to the picture frame, double-click the thumbnail.
- 11 If necessary, resize the object with the texture.



ADDING WALLS, CEILINGS AND FLOORS

Adding walls creates the space for your design project. In general, in the 2D view, you create the walls first to set up the floor plan for your project. When you create an enclosed space, HGTV Home Design automatically creates a floor, which you can change if needed.

HGTV Home Design adds a ceiling if you create a multi-storey project, but you have to specifically add a ceiling (or a roof) to completely enclose the space if it is a single-storey building.

Chapter 6 at a glance:

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Adding Interior Walls in a Loft	112

Working with Walls

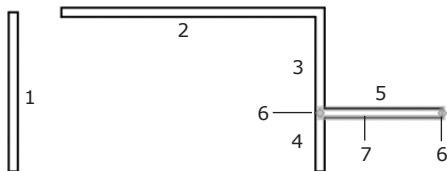
Walls form the basis of your project. Usually you begin creating a floor plan by drawing external and then internal walls.

There are two different types of walls in HGTV Home Design: storey walls and loft walls. The most general type of wall that you draw is the storey wall. Most of information in this chapter is also applicable to loft walls. To verify or change the wall type, go to the **Object Properties** tab of the Inspector.

About Wall Segments

A *wall segment* is a piece of a wall that is limited by two end points (#1–5 in the picture). When you select a wall segment, the end points (ends) are marked by green dots (handles), as indicated by # 6. You use the endpoints to change the size and orientation of the wall.

Walls have two sides. When you select a wall, you also select one of its sides. The selected side is green (#7) and the other side shows as blue. The green color indicates which side would change if you modify wall properties (such as add mouldings or apply materials) in the Inspector.



If a wall segment joins another one in the middle, the latter splits into two smaller segments. For example, if you draw a wall segment that crosses another one (#5), the 'crossed' wall splits into two smaller segments (#3 and #4).

If you remove the wall that crosses and splits another wall, HGTV Home Design joins the two segments of a straight wall into one.

When you create a room, wall segments should join (like segments #2 and #3, or like #3, #4 and #5) to form a closed shape.

The joint may break when you resize, move or add wall segments. HGTV Home Design marks places where segments are joined incorrectly by red circles on the floor plan. To correct this problem, you move a segment aside and then return it to restore the connection. If this doesn't help, delete the affected segments and add them in again.



Adding and Removing Walls

You can add as many walls as needed to create the floor plan for your project.

To add a single wall segment:

- 1 Click the **Straight Wall** button on the toolbar.
- 2 Click in the design area to set the starting point for the wall and then drag to create the wall.
- 3 Double-click to specify the end of the wall.



To draw a rectangular room:

- 1 Click the **Straight Wall** button.
- 2 Click three times in the layout to specify the first three corners of the room.
Each click ends the current wall segment and starts a new one.
- 3 When you click to place the end of the last wall, have the pointer over where the first wall begins.
HGTV Home Design closes the room's outline and quits the wall-drawing mode.



You can draw multiple wall segments until the current wall crosses or joins another segment.

When you draw walls, HGTV Home Design ‘snaps’ the pointer to help you align the wall with other objects or to draw your line in a straight horizontal or vertical direction in the 2D view

To stop drawing an unfinished wall segment, press the **Esc** key.

To remove a wall, select it and press the **Delete** key.

Selecting Walls

To select a single wall segment, click it.

To select the other side of the selected wall, click on the opposite side of that wall.

To select several segments, press the **Shift** key as you click each of them, or draw the selection rectangle around them.

The Project Tree lists all the wall segments used in the layout. By showing the Project Tree, you can easily select several or all the walls in a project.

When you move the pointer over a selected wall, the pointer changes to:

- a two-headed arrow to indicate that you can move the wall.
- a cross, when over a handle, for changing the wall's length or direction.



Moving Walls

If a wall segment has a free end (and does not make a corner with another segment), you can drag the handle to resize the wall or to change its direction.

When you move a wall segment that has two ends joining other segments, HGTV Home Design changes the length of these segments to keep the walls joined, and, therefore, reshapes the room.

To remove a joined wall segment, drag it while pressing the **Option** key.

To move walls without changing their size and direction, select and move all the joined segments together.

Wall Parameters

The Information bar displays the selected wall's length, thickness and angle.

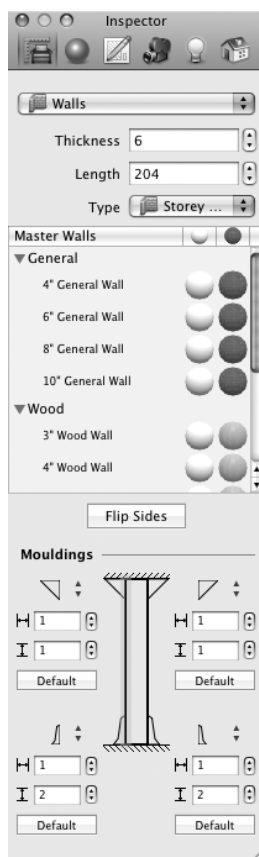
You can change most of the wall parameters in the Inspector, where you can adjust the thickness and length of the selected wall. In the Mouldings section, you can specify the shape and size of the wall bases and wall crowns.

To change the shape of a crown or a base, use the corresponding list. If the wall should have no crown or base, select the “-” item. You can also change the width and height of the selected crown or base.

Click the **Flip Sides** button to swap the materials, wall crowns and wall bases to the other side of the wall.

The **Master Walls** list shows wall templates with predefined thickness and materials. Select a template to change the characteristics of the selected wall.

In the Project Tree, you can control the **Visibility** and **Lock** options. By making a wall invisible you can take a



picture of the 3D view from a greater distance. For example, you can take a picture from outside the room to include more objects in the picture.

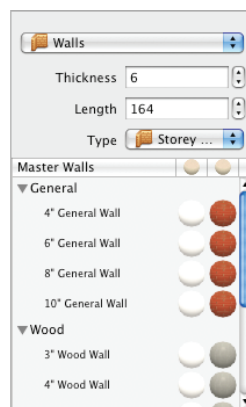
Modifying Walls

You can change a wall's size, height, mouldings or materials.

Adjusting a wall's size

To change the length of a wall, select the wall and drag its handle. Alternatively, you can change the settings on the **Object Properties** tab of the Inspector.

You can change the thickness directly in the **Object Properties** tab, or you can select a predefined wall type from the **Master Walls** list. All the wall templates in the **Master Walls** list have a preset thickness and default materials.



Adjusting a wall's height

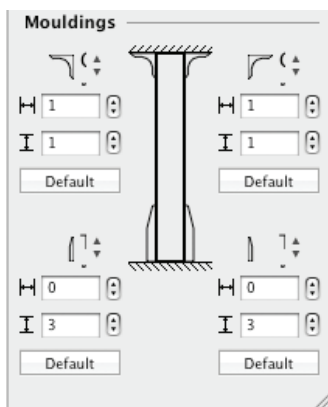
All the walls on a floor have the same height, which is equal to the height of the storey. To change a wall's height, use the **Building Properties** tab in the Inspector.

You can make a wall lower than the storey height. To do this, insert an opening into the top part of the wall.

Applying crowns and bases

The Mouldings section in the **Object Properties** tab of the Inspector shows you the mouldings on the selected side of the wall segment. You can specify a wall crown, base and trim. After adding a crown, base or trim, you can change the length and thickness, as well as the size and

shape. Additionally, you can remove a crown, base and trim from any side of the selected wall.



Applying materials

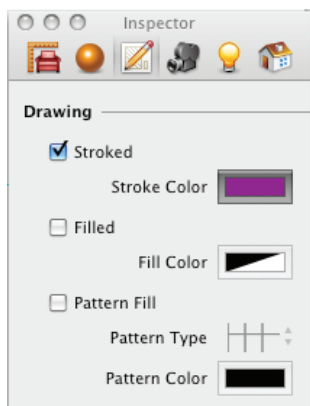
Use the **Materials** tab of the Inspector to apply or change a material. See *Chapter 11: Applying Materials* for more detail. The end surfaces (butt-ends) of walls do not have independent materials, they use the same material as one of the wall sides.

To change the material of the crown, base or trim, select it in the Project Tree, and then select the material in the Inspector. You could also drag a material onto the crown, base or trim.

Adjusting the wall representation in the 2D layout

You may want to make certain walls look differently in the 2D view depending on their material or thickness. For example, you may want to be able to distinguish between exterior and interior walls quickly. To do this, use tools on the **2D Properties** tab of the Inspector.

You can use the settings from the Drawing section to change the color of the wall's outline and the fill for wall segments, as well as apply fill patterns.



Changing Ceilings and Floors

HGTV Home Design automatically adds a floor and ceiling when you have drawn a closed shape with walls. So, usually, you do not need to add ceilings and floors manually. Automatically added floors and ceilings have the default names **AutoFloor** and **AutoCeiling** in the Project Tree.

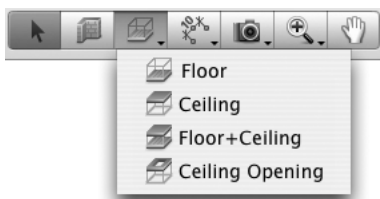
Automatic floors and ceilings change size and shape when you move or resize walls and they split into two parts when you break a room into two rooms by adding a wall.

Adding and Removing Ceilings and Floors

To change an automatic ceiling or floor, you add a ceiling or floor manually. You can add floors and ceilings together or separately.

To add a floor or a ceiling manually:

- 1 Click a **Floor** (or **Ceiling**) button in the 2D toolbar, or click the arrow with the current button and then click the correct item.



- 2 Then click in your layout several times to add corners.
- 3 Finally, double-click to add the last corner and exit the floor/ceiling drawing mode.

To remove a floor or a ceiling, select it in the Project Tree and press the **Delete** key.

Note: You cannot delete **AutoFloor** or **AutoCeiling** from the Project Tree, but you can replace either with a manually inserted floor or ceiling.

Selecting Ceilings and Floors

To select a ceiling or a floor in the 2D layout, you click its outline. Sometimes it is difficult to select a ceiling or floor because the outline goes over walls. You may find it easier to select a floor or ceiling in the Project Tree.

In the Project Tree you can control the **Visibility** and **Lock** options.

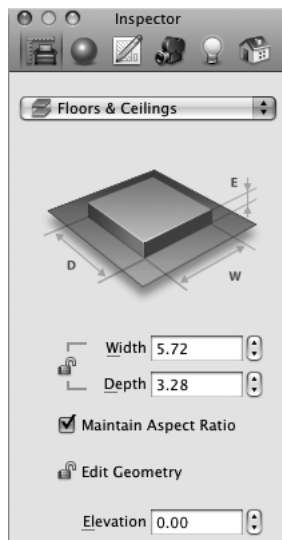
Resizing Ceilings and Floors

To resize a ceiling or a floor, select it and drag a corner handle.

The Information bar at the top of the design area shows the dimensions of the selected ceiling or floor. If the object is rectangular, and its sides are vertical and horizontal, the dimensions refer to the width and height.

To change the shape of the ceiling or the floor, you can add or delete handles. To add a handle, right-click (or Control-click) the floor's or ceiling's outline and choose **Add Contour Point**. To delete a handle, right-click (or Control-click) it and choose **Delete Contour Point**.

To lock or unlock the shape of custom floors or ceilings, click the **Edit Geometry** icon in the Inspector.



Moving Ceilings and Floors

To move a ceiling or a floor, select it and drag its edge.

Note: If you move automatic ceilings or floors, they become regular (non-automatic) objects; therefore, they no longer change their shape when you modify walls.

Adjusting the Level for the Floor or Ceiling

Rooms located on the same storey may have different floor or ceiling levels. To recreate this, you have to add a custom floor or ceiling and set its elevation different than that of the **AutoFloor** or **AutoCeiling**.

To change the floor and ceiling levels, select the floor or ceiling in 2D and change the **Elevation** value in the **Object Properties** tab of the Inspector.



In the image above, #1 is an **AutoCeiling** that has the default level. #2 indicates a custom ceiling with the **Elevation** lower than **AutoCeiling**.

#3 shows a custom floor with the **Elevation** higher than the **AutoFloor** (#4) that has the default level.

Applying Materials

Use the **Materials** tab of the Inspector to apply or change the material for a floor or ceiling. See *Chapter 11: Applying Materials* for more details.

Changing the Ceiling or Floor Representation in the Floor Plan

To make objects look differently in the 2D view depending on the material, size or other attribute, you can apply different colors and pattern fills. You can change these in the **2D Properties** tab of the Inspector.

As with walls, you can use the settings from the Drawing section to change the outline color and fill color, as well as apply fill patterns.

Adding a Floor Label

HGTV Home Design provides a special text object for floors: a Floor

570.75 ft²

Label. By default, this label shows the area of the floor.

To show or hide a floor label, choose **Show Floor Labels** from the **View** menu.

To change the text in the text object, double click it and type your own text.

You can change the location of the label in the 2D layout. To do this, drag the label to a new location.


If you place a custom floor over the **AutoFloor**, the area of the **AutoFloor** decreases by the area of the custom floor.

Adding Interior Walls in a Loft

You use loft walls to split the space in a loft. Unlike the standard walls (the storey walls), the height of loft walls is not fixed by the current storey height. A loft wall's height follows the ceiling height even if the ceiling is sloped. Unlike other wall types, loft walls don't change the shape of the roof.

By default, all walls are storey walls, but if you add walls in the loft, HGTV Home Design automatically switches to the **Loft Wall** type. To manually change the wall type, change it in the **Type** pop-up menu in the **Object Properties** tab of the Inspector.

To add a loft wall:

- 1 Verify that the 2D view shows a loft.
- 2 Click the **Straight Wall** button  on the toolbar.
- 3 Click in the design area to set the starting point for the wall and then drag to create the wall.
- 4 Double-click to specify the end of the wall.

Note: *You should use loft walls only in the loft.*

For information about creating a loft, see *Chapter 10: Working with Storeys*.

ADDING WINDOWS, DOORS AND STRUCTURAL ELEMENTS

After creating the space by drawing walls, you may want to add the doors, windows, and other openings for the rooms in your project.

HGTV Home Design provides additional items like columns and staircases for you to add to designs.

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Using Columns in a Floor Plan.....	119
Inserting and Adjusting Staircases	120

Working with Windows, Doors and Openings

Windows, doors and openings have a similar behavior in the program.

Adding and Removing Openings

You add windows, doors and openings to walls.

To add a window, door or opening:

- 1 Open the **Building Elements** tab on the *Library* pane.
- 2 Select a category (**Doors**, **Openings** or **Windows**) in the pop-up menu.
- 3 Browse through the models until you find one to add.
- 4 Drag the opening onto the layout.

When you drag an opening over the 2D layout, the opening snaps to the nearest wall and changes its orientation according to the orientation of the wall.

To remove an opening, select it and press the **Delete** key.

Selecting Openings

To select an opening, click it.

All the openings used in the layout appear in the Project Tree. You can also select them in the list.

Moving Openings

To move an opening, drag it, or you can select the opening and press the arrow keys.

To remove an opening from a wall, drag it out of the wall. If you drag an opening from a wall, when you move it close to another wall, HGTV Home Design inserts it into the wall automatically.

Adjusting Parameters for Openings

The Information bar above the horizontal ruler shows the opening height, width, thickness, elevation and angle for the selected opening.

You can modify most of an opening's parameters on the **Object Properties** tab in the Inspector.

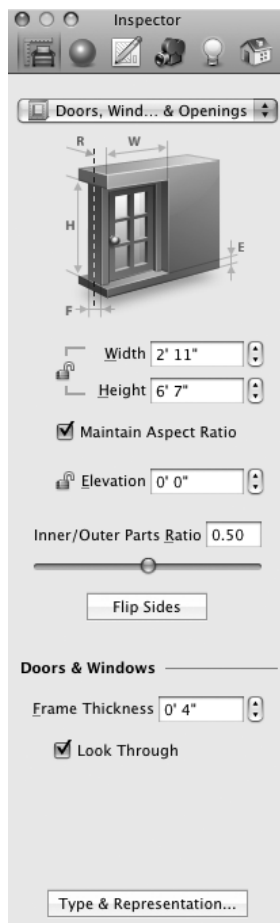
Click the **Flip Sides** button to rotate the opening 180 degrees.

To change the vertical placement on a wall, adjust the **Elevation** value. You can lock or unlock the **Elevation** box by clicking the **lock** icon. Locking this value is useful when you need to move an object only horizontally (for example, to distribute windows in the wall).

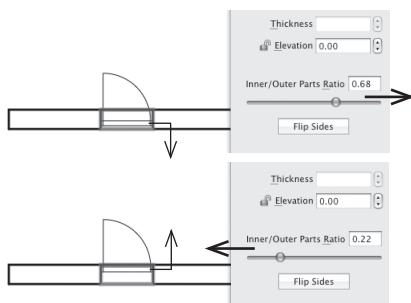
Note: In the Project Tree you control the **Visibility** and **Lock** options for an opening.

Select the **Look Through** checkbox if an opening has transparent parts (such as a window pane). When you select this checkbox, objects in the room behind a door or window appear correctly in the 3D view. Clearing the check box can speed up the process for rendering the 3D picture.

To change an object's properties such as its default orientation in 3D, the origin point and 2D representation, select the object and click the **Type & Representation** button.



Adjusting dimensions of openings



To change the dimensions of an opening, use the **Object Properties** tab in the Inspector. You can adjust the height, width, thickness, elevation and frame thickness. The **Inner/Outer Parts Ratio** slider sets the position of an opening in relation to the wall (for example, to specify how deep a door is in the doorway).

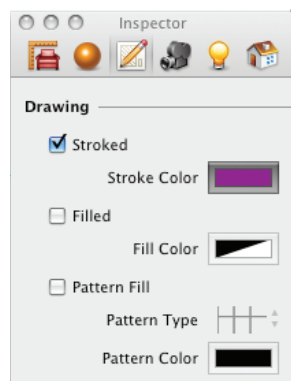
Applying materials

Use the **Materials** tab of the Inspector to apply or change a material. See *Chapter 11: Applying Materials* for more details.

Adjusting the representation in the 2D layout

You may want to make openings look differently in the 2D view depending on the material they are made of. To do this, use the **2D Properties** tab of the Inspector.

You can use the settings from the Drawing section to change the outline color and fill color for the opening, as well as apply fill patterns.



Adding Niches and Wall Panels

Niches and wall panels have a similar behavior in HGTV Home Design.

Adding and Removing Niches and Wall Panels

You add niches and wall panels to walls.

To add a niche or wall panel:

- 1 Open the **Building Elements** tab on the *Library* pane.
- 2 Select a category (**Niches** or **Wall Panels**) in the pop-up menu.
- 3 Browse through the models until you find one to add.
- 4 Drag the object onto the layout.

When you drag the object over the 2D layout, it snaps to walls and changes its orientation according to the orientation of the closest wall.

To remove a niche or wall panel, select it and press the **Delete** key.

Selecting Niches and Wall Panels

To select an object, click it.

The Project Tree lists all the niches and wall panels used in the layout. You can also select them in the list.

Moving Niches and Wall Panels

To move a niche or wall panel, drag it, or you can select it and then press the arrow keys.

To remove a niche or wall panel from the wall, drag it away from the wall. If you drag a niche or wall panel from a wall, when you move the niche or wall panel near a wall, HGTV Home Design inserts it into the wall automatically.

Adjusting Parameters of Niches and Wall Panels

The Information bar above the horizontal ruler shows the selected niche's (or wall panel's) height, width, thickness, elevation and angle.

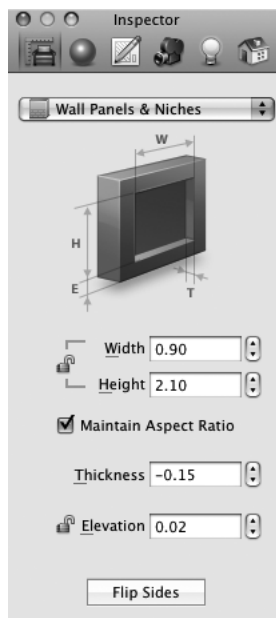
You can modify the height, width, thickness, elevation and frame thickness of a niche or wall panel on the **Object Properties** tab in the Inspector.

The **Thickness** of one of these objects may be either positive and negative. With the positive value, it looks like a wall panel. With the negative value, it looks like a niche.

You can attach niches and wall panels to walls on only one side. To attach a niche or wall panel to another wall side, click the **Flip Sides** button in the Inspector.

You can change the height or width of the niche or wall panel on the wall.

You can change the elevation of the niche or wall panel on the wall. By clicking the lock icon, you can lock the **Elevation** parameter to move an object only horizontally (for example, to distribute niches in the wall).



Note: *In the Project Tree you control the Visibility and Lock options.*

To change the object's default properties such as its orientation in 3D, its origin point and 2D representation, select the object and click the **Type & Representation** button in the Inspector.

Applying Materials

To change the material for a niche or wall panel, use the material library located in the **Materials** tab of the Inspector. See *Chapter 11: Applying Materials* for more detail.

Adjusting the Object Representation in 2D

To make multiple niches or wall panels look differently in the 2D view due to the material, size or other principle, apply different stroke colors and pattern fills. These can be changed in the **2D Properties** tab in the Inspector.

Using Columns in a Floor Plan

Columns are other structural elements that you can add to your projects to add visual and structural supports to the design.

Adding and Removing Columns

You can add columns anywhere in a layout. The height of an added column is equal to the storey height.

To add a column:

- 1 Open the **Building Elements** tab on the *Library* pane.
- 2 Select the **Columns** category in the pop-up menu.
- 3 Browse through the models until you find one to add.
- 4 Drag the column onto the layout.

To remove a column, select it and press the **Delete** key.

Adjusting the Parameters for Columns

The Information bar above the horizontal ruler shows the selected column's width, depth and height.

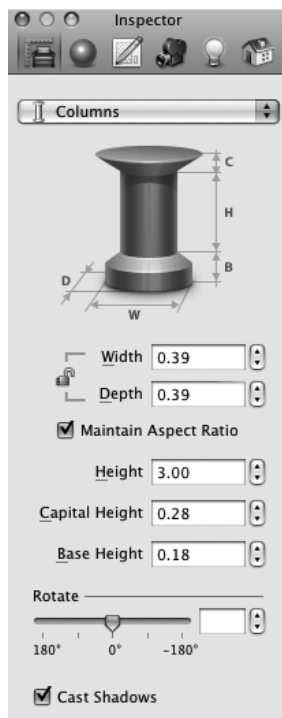
You can adjust most of the column's attributes in the **Object Properties** tab of the Inspector, such as dimensions of the selected column, as well as the height of its capital and base. You can also rotate columns in this tab.

Note: In the Project Tree you control the **Visibility** and **Lock** options.

Adjusting the column's size

You can adjust the height of the column base and capital separately in the **Object Properties** tab.

The default column height is equal to the height of the walls.



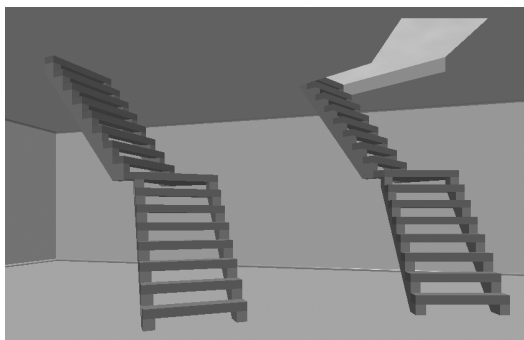
Materials

Use the **Materials** tab of the selected to apply or change the column's material. See *Chapter 11: Applying Materials* for more details.

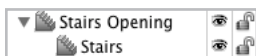
Inserting and Adjusting Staircases

Stairs are a special object type in HGTV Home Design. Unlike other objects, they create an opening in the slab above. To activate this property, the staircase object should have the **Stairs** type set in the *Type & Representation* dialog box. The stairs in the provided object library do, but if you import a stair model, you need to adjust this manually.

For example, the illustration below shows two copies of the same staircase object with two different object types applied. The left staircase is **Furniture**, which is a generic object type. The right one is **Stairs**. When you import a 3D model of a staircase, it has the **Furniture** type by default.



A **Stairs** object has two components: the slab opening and the staircase itself. You can see its structure in the Project Tree.



The **Stairs Opening** item determines certain parameters for the whole staircase.

If you select **Stairs Opening**, you can change the material of the opening. To change the material of the staircase, select the **Stairs** item.

Adding and Removing Staircases

The height of an added staircase is equal to the storey height.

To add a staircase:

- 1 Open the **Building Elements** tab on the *Library* pane.
- 2 Select the **Stairs** category in the pop-up menu.
- 3 Browse through the models until you find one to add.
- 4 Drag the staircase onto the layout.

To remove a staircase, select it and press the **Delete** key.

Selecting a Staircase

To select a staircase, click it.

The Project Tree lists all staircases in the project. Selecting the **Stairs Opening** item selects the whole staircase.

Moving a Staircase

To move a staircase, drag it, or, you can select it and then press the arrow keys.

Adjusting Staircase Parameters

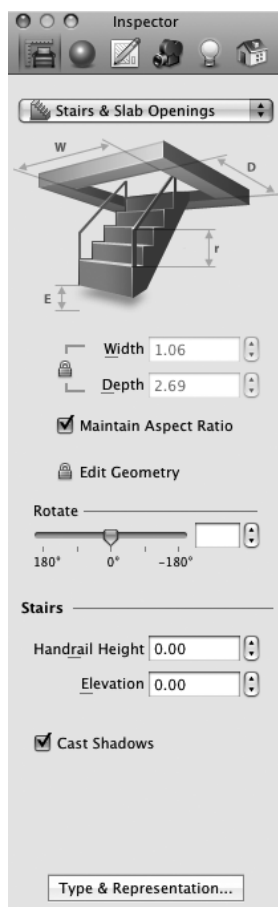
The Information bar above the horizontal ruler shows the height, width, thickness, elevation and angle of a staircase.

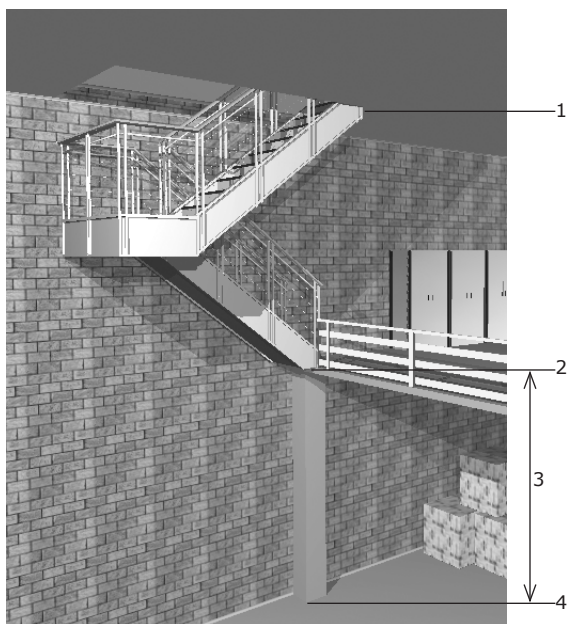
You can adjust most of these parameters in the **Object Properties** tab of the Inspector.

To control the size of the opening, adjust the **Width** and **Depth** values.

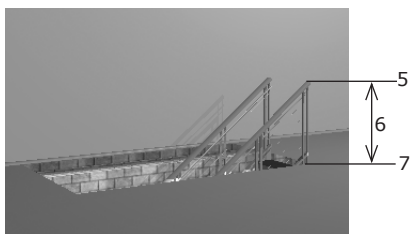
The default height of a staircase in 3D is equal to the storey height (the distance from 1 to 4 in the following picture).

The **Elevation** parameter defines the distance (3) between the bottom of a staircase (2) and the floor (4). You adjust the **Elevation** if a staircase begins on a platform that is located above the floor level.





By default, the top of a staircase meets the floor of the storey above (7 below). If a staircase has a handrail, its top (5) is above the floor level. You should manually set the **Handrail Height** value (6) to have the top stair meet with the floor.



To change a staircase's properties such as its orientation in 3D, its origin point and 2D representation, select the staircase and click the **Type & Representation** button in the Inspector.

Applying Materials

Use the library of materials located in the **Materials** tab of the Inspector to apply materials to a staircase.

To change the material of a staircase opening, select this part of the staircase object in the 2D or 3D view or select the **Stairs Opening** item in the Project Tree.

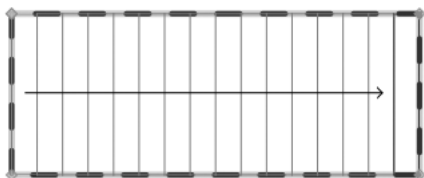
To apply new materials to a staircase, itself, expand a **Stairs Opening** item in the Project Tree and select **Stairs**.

For details about applying materials, see *Chapter 11: Applying Materials*.

Editing the Opening Shape

You can change the shape of the opening in the slab on the floor plan. HGTV Home Design indicates the opening by a dashed line in the 2D view. The default opening shape usually coincides with the outline of the staircase as seen from the top.

To change the shape of a selected staircase opening, drag the handles on the opening's outline.



The number and location of the handles depends on the model's shape. For example, spiral staircases usually have more handles than straight stairs.

To prevent the opening shape from getting changed accidentally, lock it by clicking the Edit Geometry **lock** icon in the **Object Properties** tab of the Inspector. If you do this, you won't see the handles and cannot change the opening's shape.

ADDING AND ADJUSTING FURNITURE

Once you've added all the structural elements to the layout, you can add furniture to develop the interior design. HGTV Home Design includes models for a range of furniture — sofas, beds, tables, lamps, appliances, electronics, plants, pictures and more.

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Working with Furniture

In HGTV Home Design, the various pieces of furniture have similar behavior and similar settings.

Adding and Removing Furniture

You can add furniture from the provided model library or you can import 3D furniture models.

To add furniture from the object library:

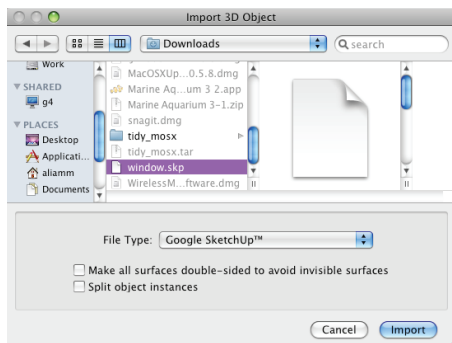
- 1 Open the **Building Elements** tab on the *Library* pane.
- 2 Select the **Columns** category in the pop-up menu.
- 3 Browse through the models until you find one to add.
- 4 Drag the piece of furniture onto the layout.

The built-in object library may not contain all objects necessary for developing your project. With HGTV Home Design you can import other objects created in 3D applications, which are in the following formats:

- 3D Studio format (*.3ds)
- Google SketchUp™ format (*.skp)
- Ogre XML format (*.xml)

To import an object:

- 1 Choose **Import 3D Object** from the **File** menu.



- 2 In the *Import 3D Object* dialog box, specify the type of file in the **File Type** pop-up menu.
- 3 Locate and select the file for that object.
- 4 If the object is a Google SketchUp object or a 3D Studio object, specify how to import the file:
 - **Make all surfaces double-sided to avoid invisible surfaces:** select to adjust the surfaces as needed to be able to easily work with all surfaces.
 - **Split object instances:** select to split a compound object into separate objects.(See details in the Importing Google SketchUp Objects topic in online help.)
- 5 Click **Import**.

The object model may have references to one or several textures. If so, HGTV Home Design tries to find them in the folder that has the selected file. If HGTV Home Design cannot find a texture, it asks you to specify its location. The texture's name appears at the top of the *Open File* dialog box.
- 6 If the *Open File* dialog box appears, specify the location for the texture file or skip opening textures and use the materials from the built-in library. Click **Open**.
- 7 In the *Type & Representation* dialog box, adjust the settings as needed and click **OK**.

(The default **Object type** is **Furnishing**.)
- 8 Drag to move the imported object in your project.

You can also import a model from the Google 3D Warehouse.

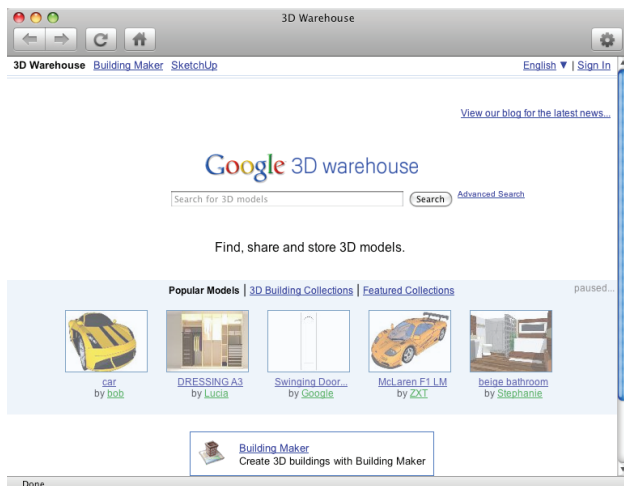
HGTV Home Design integrates with Google 3D Warehouse so you can directly import files. To be able to do this, you must have an Internet connection.

To import a 3D model directly from Google 3D Warehouse:

- 1 Click the **Google 3D Warehouse** button in the toolbar or choose **Google 3D Warehouse™** from the **Window** menu.



The Google 3D Warehouse page opens in a browser window.



- 2 Find the model you want to import. (You can click thumbnails and links in the browser window to navigate to a file, or you can use the search box.)
- 3 Once you have found a model to use in your project, open its page.
- 4 Click the **Download Model** button on the object's page. The button may also be called **Download to HGTV Home Design, Get Model** or **Download to Google SketchUp**.
- 5 Position the object as needed in the layout.

To remove a piece of furniture or a related object, select it and press the **Delete** key.

Selecting a Piece of Furniture

To select an object, click it with the mouse.

To select several objects, click each of them as you press the **Shift** key, or drag the pointer to draw a selection rectangle around them.

The Project Tree lists all furniture objects used in the layout. You can select objects by clicking their names in the list.

Moving Furniture

To move a furniture object, drag it, or you can select it and press the arrow keys. You can move objects in both the 2D and 3D views.

Modifying Furniture

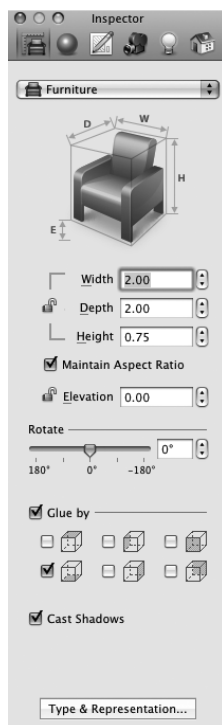
The Information bar above the horizontal ruler shows the select furniture object's width, height, depth, elevation and angle.

You can modify most of the selected furniture object's parameters in the Inspector on the **Object Properties** tab.

Note: *In the Project Tree you control the **Visibility** and **Lock** options.*

To change an object's properties such as the orientation in 3D, the origin point and 2D representation, select the object and click the **Type & Representation** button in the Inspector.

Because the library does not have all possible pieces of furniture, you may need to adjust the existing objects for your needs.



Changing the Size

To resize a piece of furniture, select it and unlock the dimensions by clicking the **lock** icon. Then type the new values.

To resize the object proportionally, make sure to have the **Maintain Aspect Ratio** checkbox selected.

Rotating Furniture

To rotate the selected piece of furniture, drag the **Rotate** slider.

Adjusting Elevation

To change the elevation of a piece of furniture, change the value in the **Elevation** box. In the 3D view you can drag an object upward or downward, but this is less accurate.

You can lock or unlock the **Elevation** box by clicking the **lock** icon. Locking the **Elevation** value is useful when you need to move an object only horizontally in the 3D view (for example, to distribute things over a table).

Turning Shadows On or Off

The **Cast Shadows** checkbox determines whether HGTV Home Design renders shadows for that object in the 3D view. Clearing this checkbox can be useful to:

- Minimize the task for the rendering engine.
Calculating the 3D scene with all the shadows displayed requires more time. To speed up rendering, disable unnecessary shadows. For example, shadows on walls and floor carpets are not seen at all and can be turned off.
- Emphasize some key objects in your 3D design.
You can create a design where only several objects cast shadows. This attracts more attention to key objects — keeping others in the background.

Adjusting Lamp Parameters

Lamps are listed in a separate section of the **Furnishing** tab. In addition to the parameters that other furniture items have, you can change color and luminosity of light. You change these parameters in the **Light Properties** tab of the Inspector. For more details, see *Chapter 12: Applying Lighting*.

Applying Materials

You use the **Materials** tab of the Inspector to apply or change the material used with a piece of furniture. For example, you can change the fabric for a chair or the wood shown for a table. See *Chapter 11: Applying Materials* for more details.

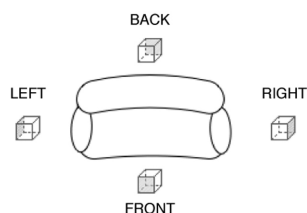
Adjusting Furniture in Relation to Walls, Floors and Ceilings

The general location of most objects in a room is somewhat pre-determined by their purpose. For example, tables and chairs are always located on the floor; wardrobes and bookcases stay on the floor near a wall. Most light fixtures hang from the ceiling or are affixed to a wall.

HGTV Home Design takes this characteristic of objects into account.

This is especially convenient when you move an object in the 3D view: it stays ‘stuck’ to the selected surface.

For example, you do not need to worry about chairs and lamps hovering somewhere between the floor and the ceiling.



With the **Glue By** set of checkboxes in the Inspector you can select up to three object sides that stick to walls, the floor or the ceiling. The left, right, front and back sides can glue to walls; the top side can glue to the ceiling, and the bottom side can glue to the floor.

For example, if you select a **Glue By Left Side** checkbox for an object and you bring the object close to a wall, it sticks to the wall. HGTV Home Design may rotate an object as necessary to place it properly.

Placing an Object on Top of Another

You usually place objects like TV sets, computers, and cookware atop other objects such as tables and stands.

For example, you could place a TV set onto a table. To be able to change the elevation of the TV set, unlock its **Elevation** box in the **Object Properties** tab of the Inspector by clicking the **lock** icon.

To place an object on top of another object:

- 1 Select the object (such as a TV set) that you want to have on top.
- 2 To be able to change its elevation, if necessary, click the **lock** icon next to the **Elevation** box in the **Object Properties** tab of the Inspector.
- 3 If the object (such as the TV set) is higher than the other object (such as the table), drag the first object over the second in the 2D or 3D view.

For example, if the TV is already higher than the table, the TV set automatically ‘jumps’ onto the table.

or

If the first object is lower than the other object, drag the first object over the second object in the 2D or 3D view.

Then, increase the **Elevation** value in the Inspector to lift the object or press **Cmd-Option** as you drag the object upwards in the 3D view.

For example, if the table’s top is higher than the TV set, the latter appears under the table after dragging it. Then, increase the **Elevation** value to lift the TV set until it is on the table.

WORKING WITH ROOFS

Roofs are special objects in HGTV Home Design. They are not available in the Library pane as the other structural objects are.

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Roofs in HGTV Home Design

A roof is a special object in HGTV Home Design. As with walls, you must create a roof inside the program. (You cannot import a roof.) When HGTV Home Design creates the roof it takes into account the original roof style (the template selected in the *Roofing Assistant* dialog box) and the outline of the outer walls.

Each roof has several sides. Gables on a roof are also considered sides. For example, (1), (4) and (5) in the picture are roof sides. A roof side can have several segments. The first side (1) has two segments: (2) and (3).



Roofs are listed in the Project Tree. You can select a roof or its parts in the Project Tree or in the 3D view. (Roofs do not appear in the 2D view.)

A roof can be added to any storey that is entirely or partially under the open sky. Usually, a roof covers the whole upper storey.

A roof may change its shape dynamically when you add, delete or resize walls or the floor. The height of the roof is not limited by the corresponding storey height.

To create a skylight, you can ‘cut’ a window into the roof.

To apply a new material to the roof, drag the material from the library onto the roof in the 3D view. See *Chapter 11: Applying Materials* for more details.

The Roof Types

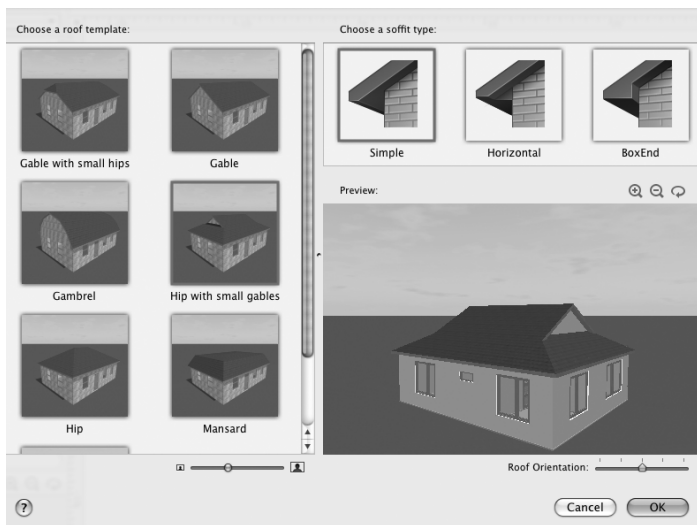
With the *Roofing Assistant* dialog box in HGTV Home Design you can select one of several basic types of roofs — such as gable, hip or mansard. You can create a more complicated roof by adding or deleting roof slope segments and by changing their angles. You change the properties of roofs in the **Object Properties** tab of the Inspector.

Using Panels, Openings and Niches with Roofs

To add a panel, opening, or niche to a roof, drag one from the object library onto the roof.

Adding and Deleting Roofs

You use the *Roofing Assistant* dialog box to add a standard roof to your building.

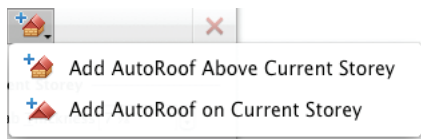


Adding a Roof

You either add a roof with a loft (a new storey) or add it to the current storey.

To add a roof with a loft:

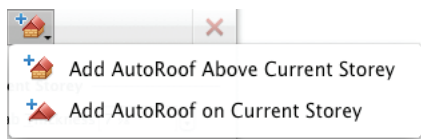
- 1 Select the upper storey of your building in the **Building Properties** tab of the Inspector.
- 2 Choose **Building ▸ Add AutoRoof Above Current Storey** from the **Edit** menu or click the **Add AutoRoof Above the Current Storey** button in the Inspector.



- 3 In the *Roofing Assistant* dialog box, select a roof's thumbnail to select the roofing type.
- 4 Drag the **Roof Orientation** slider as needed to fit onto the building.
- 5 Specify the type of soffit to use.
A *soffit* is the area between the outside edge of the roof and the wall the roof is on.
- 6 Click **OK**.

To add a roof in the current storey:

- 1 Select the upper storey of your building in the **Building Properties** tab of the Inspector.
- 2 Choose **Building ▸ Add AutoRoof on Current Storey** from the **Edit** menu or click the **Add AutoRoof on the Current Storey** button in the Inspector.



- 3 In the *Roofing Assistant* dialog box, select a roof's thumbnail to select the roofing type.
- 4 Drag the **Roof Orientation** slider as needed to fit onto the building.
- 5 Specify the type of soffit to use.
- 6 Click **OK**.

Once you've added a roof to your project, you can change its properties using the Inspector.

After adding a roof, the button in the Inspector on the **Building Properties** tab changes its function from adding to removing the roof.

Deleting a Roof

To delete a roof:

- 1 In the **Building Properties** tab of the Inspector, select the storey where the roof is located.
- 2 Choose **Building** ► **Remove AutoRoof Above Current Storey** from the **Edit** menu.
or
Click the **Remove AutoRoof Above Current Storey** button in the Inspector on the **Building Properties** tab.

To delete a roof together with the storey:

- 1 In the **Building Properties** tab of the Inspector, select the storey where the roof is located.
- 2 Choose **Building** ► **Delete Current Storey** from the **Edit** menu.
or
Click the **Delete Current Storey** button (X).

Adjusting Roof Properties

You can use the settings located in the **Object Properties** tab of the Inspector to change the style of a roof. To change the materials of a roof, use **Materials** tab.

In the first toolbar on this tab, you can change the soffit to either a simple, horizontal, or box end soffit.

In the **Fascia Limit** box, adjust the maximum size of the fascia.

The table lists the segments of the selected roof side and parameters for each segment.

In the toolbar in the middle of the tab, Click the first + button to add a roof segment above the selected one.

Click the second + button to add a roof segment below the selected one.

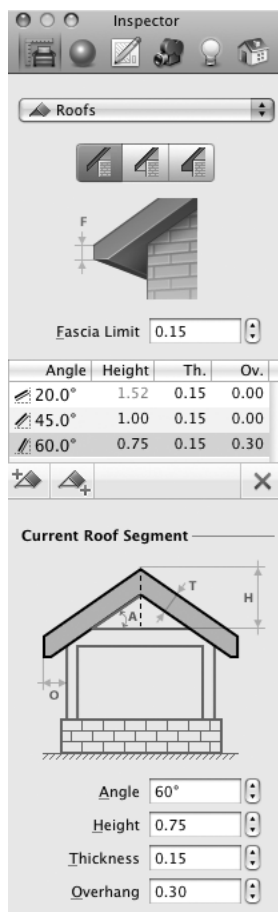
Click the **X** button to delete the selected roof segment.

Use the **Angle** box to adjust the angle of the selected roof segment.

Use the **Height** box to adjust the height of the selected roof segment. (You cannot modify the height of the uppermost or sole segment.)

Use the **Thickness** box to adjust the thickness of the selected roof segment.

Use the **Overhang** box to adjust the distance between the selected roof segment and the supporting wall.



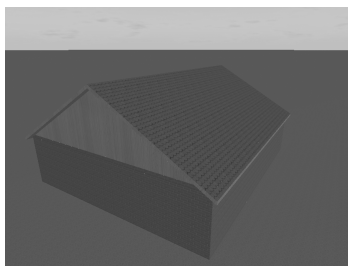
Modifying the Style of a Roof

You can modify the style of a roof using the settings in the **Object Properties** tab of the Inspector.

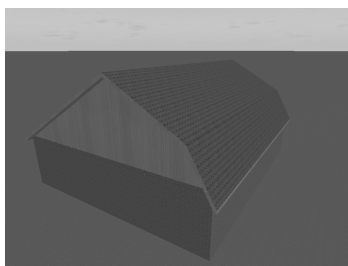
The examples in this section show how to modify a gable roof to a gambrel, hip or shed roof. All of these roof styles are standard and can be created using the *Roofing Assistant* dialog box.

To be able to select the sides of a roof and preview the results, open the 3D view.

To change a gable roof to a gambrel roof:

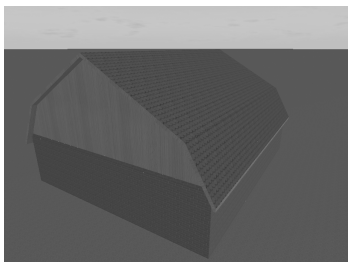


- 1 In the 3D view, select a roof slope.
- 2 In the Inspector, click the **Add Segment Below Selected** button.

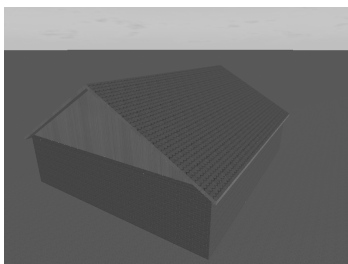


- 3 With that segment selected in the table, change the **Angle** of the lower segment to **60°**.
- 4 Adjust the **Height** of the lower segment if necessary.

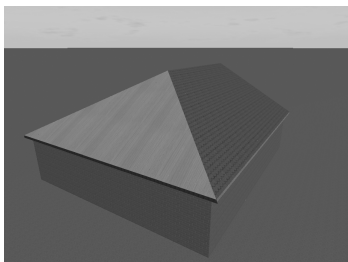
- 5 Repeat steps 1–4 with the other roof slope.



To modify a gable roof to a hip roof:

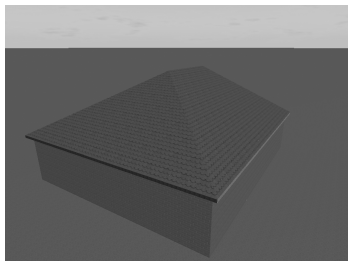


- 1 In the 3D view, select a gable.
- 2 In the Inspector, change its **Angle** to **45°**.

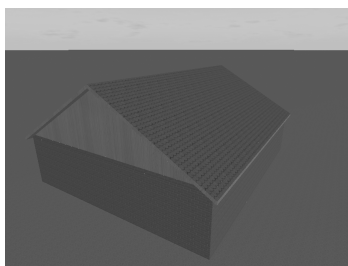


- 3 If necessary, adjust the **Overhang** distance.
- 4 Repeat steps 1 – 3 for the other gable.

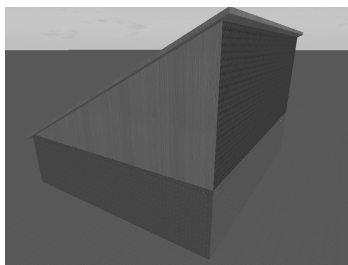
- 5 Change the material of new slopes using the **Material Picker** located in the **Materials** tab of the Inspector. (See *Chapter 11: Applying Materials* for details.)



To modify a gable roof to a shed roof:



- 1 In the 3D view, select a roof slope.
- 2 In the Inspector change its **Angle** to **90°**.



- 3 Select the other roof slope and change its **Angle** to **10°**.

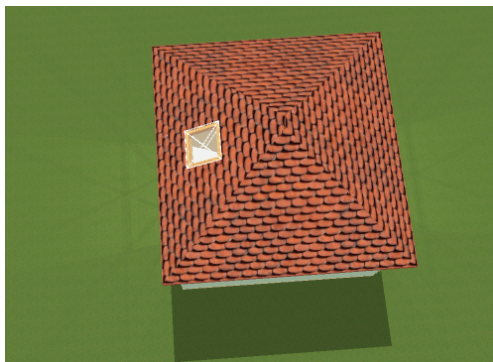
- 4 If necessary, adjust the **Overhang** distance and **Thickness** of the roof slope.
- 5 Change the material of the new slopes, using the **Material Picker** located in the **Materials** tab of the Inspector. (See *Chapter 11: Applying Materials* for details.)

Adding a Skylight to a Roof

To create a skylight, you drag a window from the object library and drop it onto the roof. It is easier to position a skylight in the 3D view, but you can use the 2D view to align skylights.

To create a skylight:

- 1 Click the **Building Elements** button on the toolbar.
or
Choose **Library ▸ Building Elements** from the **Window** menu.
- 2 Specify the **Windows** category in the pop-up menu.
- 3 Browse through the window objects.
- 4 If necessary, switch to 3D view.
- 5 Drag a window from the object library onto the roof.
- 6 Position the skylight.



In this way you can also add an opening, niche or panel to a roof.

WORKING WITH STOREYS

With HGTV Home Design you can create multi-storey buildings: a maximum of two storeys and a loft. By default, each new project has only one floor, but you can add a new floor above or below it. You can add a loft when you add a roof to your project.

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About Storeys in HGTV Home Design

All projects must contain a ground floor. If a project has multiple floors, you can designate any of them as the ground floor.

In the Project Tree, each floor is represented as a compound object that includes other objects — furniture, doors, windows, walls and so forth — located on that floor.

Each storey includes a slab above it. This slab is invisible in the 3D view until you add the ceiling to the current storey or add the floor to the storey above.

In the 3D space, the elevation of an object is calculated in relation to the storey where the object is located. An object can be listed in the Project Tree among objects of one storey, but the object can appear in another storey in the 3D picture. This happens when the elevation of an object is greater than the storey height.

Managing Storeys in the Inspector

To control storeys, use the tools in the **Building Properties** tab of the Inspector.

You use the **Building Properties** tab of the Inspector to:

- Add storeys.
- Remove storeys.
- Select the active storey.
- Specify the ground floor.
- Change the slab height.
- Change the storey height.

Building Properties Parameters

The **Elevation** box shows the elevation of the ground floor. Increasing this value elevates the whole building.

The **Foundation** value gives the thickness of the foundation. If your building doesn't have a basement, the **Foundation** value must be equal or greater than **Elevation**.

Each storey in the project has a thumbnail of the floor plan shown in the middle of the tab. The thumbnail of the current floor has a blue frame around it. To select another floor, click its thumbnail. An icon in the lower-left corner of the thumbnail identifies the ground floor.

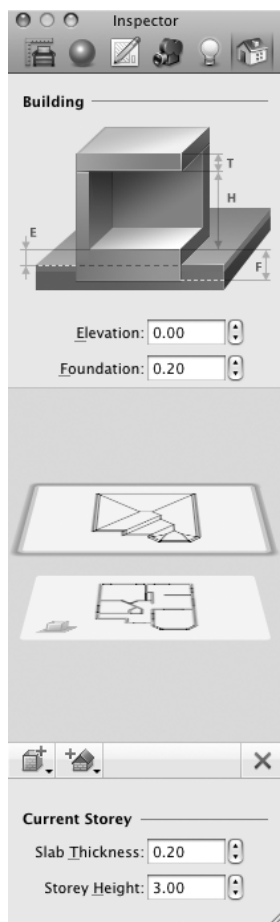
In the toolbar, click the **Add Storey Above Current** button (the first button) to add a storey above the current one. Click the arrow to add a floor above or below the current one, or to specify the selected floor as the ground floor.

Click **Add AutoRoof Above Current Storey** button (the second button) to add a roof with a loft above the current floor. Click the arrow to add a roof to the current floor.

Click **X** to delete the selected floor.

To change the thickness of a storey's slab, select the thumbnail for a floor and then change the **Slab Thickness** value.

To change the height of the walls for a storey, select the thumbnail for a floor, and then change the **Storey Height** value.



Adding Storeys

To add a storey above the current one, click the **Add Storey Above Current** button or choose **Building ► Add Storey Above Current** from the **Edit** menu.

To add a storey below the current one, click the **Add Storey Above Current** arrow and choose **Add Storey Below Current**. Alternatively, choose **Building ► Add Storey Below Current** from the **Edit** menu.

When you add a new storey, it becomes active automatically (its floor plan shows in the 2D view). The outer walls, floor and ceiling of the previously selected storey are copied onto the new floor.

Removing Storeys

To remove the active storey, click the **Delete Current Storey** button (X) in the Inspector. Alternatively, choose **Building ► Delete Current Storey** from the **Edit** menu.

HGTV Home Design removes all the objects located on the removed storey, too.

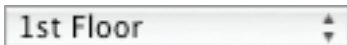
If you remove the ground floor, another floor automatically becomes the ground floor.

Note: *A project must have at least one storey: the ground floor.*

Selecting the Active Storey

The active (current) storey is the one whose floor plan appears in the 2D view. The active storey's name appears in the lower-left corner of 2D view. In the Inspector, on the **Building Properties** tab, the thumbnail of the active storey is outlined in blue.

To make another storey active, click its thumbnail on the **Building Properties** tab of the Inspector or select it from the **Storey** pop-up menu at the lower-left corner of the main window when the 2D view is active.



Specifying the Ground Floor

A new project has one floor by default. This floor is the ground floor. After adding more floors, you can specify any floor to be the ground floor.

To designate a floor as the ground floor:

- 1 Make that storey active.
- 2 Click the **Add Storey Above Current** arrow in the **Building Properties** tab of the Inspector and choose **Mark Storey as Ground**.
or
Choose **Building** ► **Mark Current Storey as Ground** from the **Edit** menu.
or
Click the **Storey** pop-up menu in the lower-left corner of the main window and choose **Mark Current Storey as Ground**.

Changing the Slab Thickness

To change the slab thickness, select a storey and then change the **Slab Thickness** value on the **Building Properties** tab in the Inspector. You can type a new value or click the arrows.

Changing the Storey Height

To change the storey height, select a storey and then change the **Storey Height** value on the **Building Properties** tab in the Inspector. You can type a new value or click the arrows.

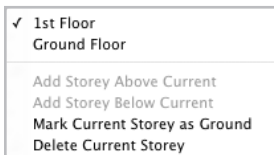
Viewing Storeys in the 2D View

The 2D view displays the floor plan of the active (current) storey.

Only one storey can be active in the 2D view at any time.

To dimly see the walls of the storey above or below the current one, choose **Show Storey Above Current** or **Show Storey Below Current** from the **View** menu to show a checkmark next to the command.

In the lower-left corner of the main window when the 2D view is showing, you can use the **Storey** pop-up menu to view the active storey and perform operations on storeys.



APPLYING MATERIALS

In HGTV Home Design, you use materials to apply color to an object or to map a texture onto its surface. This makes the object look more realistic in the 3D view. A material determines the object's color and also affects light dissipation and light reflection.

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Working with Materials

You apply materials from the **Materials** tab of the Inspector. The Materials library includes numerous categories for applying various types of materials — including **Bricks**, **Wood**, **Pictures**, **Fabric**, **Metal** and so forth.

The first time you open the **Materials** tab, it may take a few minutes for HGTV Home Design to load the Materials library.

You cannot modify the materials supplied with HGTV Home Design, but you can add your own materials to the Materials library.

Applying Materials

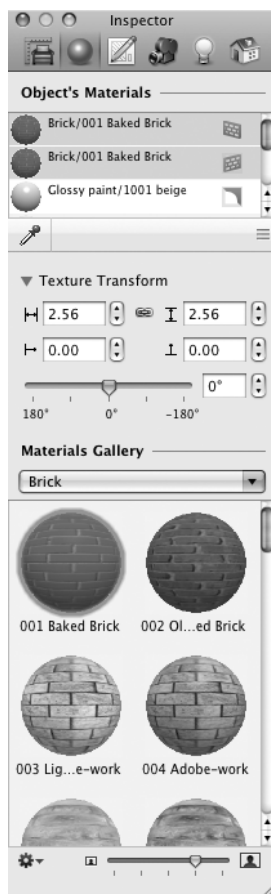
The Materials library is available from the **Materials** tab of the Inspector. On this tab you can:

- Select and apply a material to an object.
- Preview materials already applied to an object.
- Create new materials.

The **Object's Material** list shows thumbnails of the selected object's materials.

Click the **Material Picker** button to be able to pick up a material from one object and apply it to another. You can use it to make objects match.

You can drag the divider bar above the Texture Transform area to expand or collapse the **Object's Material** list.



Click the **Texture Transform** triangle to expand and collapse the Texture Transform area. See *Adjusting the Texture Size and Orientation* for more details about changing these settings.

Adjust the texture size (horizontal and vertical) to ‘fit’ properly on a surface. The **linked chain** icon indicates that the aspect ratio would be maintained if you changed one value. Click to be able to change both values.

Use the texture horizontal and vertical offset parameters to change the positioning of the texture on the object’s surface.

Drag the **Rotate** slider to rotate the texture on the object.

Click the **Material category** pop-up menu to specify a category or to add and remove custom categories.

The Materials Gallery lists thumbnails of materials in the currently active category.

Drag the Thumbnail slider to change the size of the sample thumbnails in the Materials Gallery.

Click the **gear** icon to add or delete custom materials::

- **New Material** opens the *Create New Material* dialog box.
- **Delete Selected Material** removes the currently select custom material.

Applying a Material to an Object

There are several ways to apply material to an object.

The easiest way to apply a material is, in the 3D view, to drag a material from the Materials library onto an object. An object may have multiple parts so be sure to drag the material to the exact part of the object you want to modify.

The other way to apply a material is to use the Inspector to change the material of one or more parts of an object

To apply a material with the Inspector:

- 1 Select an object.
- 2 Open the **Materials** tab of the Inspector.
All the existing materials for the selected object appear in the **Object's Materials** list.

Note: *Each item in the list actually represents a part of the selected object. The same material may appear in the list several times. If so, that material has been applied to several parts of the object.*

- 3 Select one or more parts to change.
To select multiple parts, click each part while pressing the **Cmd** key. To select a range of parts, click the first part and then press the **Shift** key as you click the last part.
- 4 Specify a category in the **Material category** pop-up menu.
- 5 Browse through the material samples in that category.
- 6 Select one of the samples.

Adjusting the Texture Size and Orientation

You use the Texture Transform settings on the **Materials** tab to adjust the texture size and orientation of materials applied to an object. You can do this for walls, ceilings, floors, wall panels, openings and niches if you have applied a material with a texture.

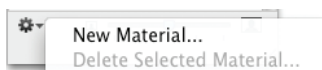
In particular, the Texture Transform settings are useful for making a texture meet a wall edge or corner.

Adding Materials to the Library

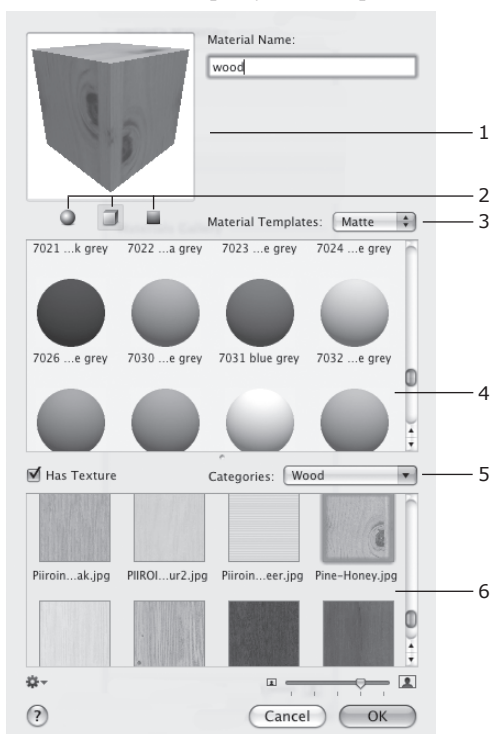
You can ‘add’ a new material to the library by ‘creating’ one from existing elements or you can import an image file as a texture.

To add a material:

- 1 Click the **gear** icon at the bottom of the **Materials** tab and choose **New Material**.



In the *Create New Material* dialog box, you see a preview of the material at the top as you develop it.



- 2 Beneath the preview area, click a button to show the preview as a sphere, a cube or a flat surface.
- 3 In the **Materials Templates** pop-up menu, specify either **Matte** or **Glossy** as the surface for the new material.
- 4 Then select a material from the existing Materials library.
- 5 To apply a texture, select the **Has Textures** checkbox.
- 6 Specify a texture category in the **Categories** pop-up menu.
- 7 To use a texture from the Textures library, select a texture from the Textures library.

To import a texture, click **Import Custom** at the bottom of the Textures library. In the *Import Custom* dialog box, locate and select the image file and click **Import**.

Note: *The maximum size for the imported image is 512 x 512 pixels. If you import a larger image, HGTV Home Design scales the image down while maintaining the original aspect ratio.*

- 8 Type a name into the **Material Name** box.
- 9 Click **OK**.

HGTV Home Design saves the new material in the currently open material category.

Adjusting the Actual Texture Size

The texture for wall or floor tiles should render in relation to the actual tile size. After applying a texture to a wall or floor, you can set up the actual tile size. Select the object with the texture and, in the **Materials** tab on the Inspector, click the triangle to expand the Texture Transform section. Set the **Texture Height** and **Texture Width** to the actual size of the texture. For example, set the values to 12 if the tile size is 12 by 12 inches.

Note: *You should have the measurement system set up appropriately (for example, inches) in Project Setup dialog box.*

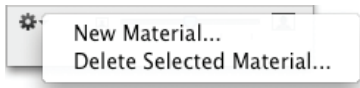
Removing Custom Materials from the Library

If you've added custom materials to the Materials library, you can remove them if you wish.

Note: *You cannot remove any of the provided materials.*

To remove a custom material:

- 1 Select the custom material in the **Materials** list on the **Materials** tab of the Inspector.
- 2 Click the **gear** icon at the bottom of the tab and choose **Delete Selected Material**.




- 3 When the confirmation message appears, click **Delete**.

Matching Materials in Objects

You use the **Material Picker** to copy a material from one object to another instead of searching for the material in the library. Using the **Material Picker** is convenient when you need to match materials for several furniture objects.

To copy a material:

- 1 Open the **Materials** tab of the Inspector.
- 2 Open the 3D view.
- 3 Select the destination object for which you want to change a material.
Its material(s) appear in the **Object's Materials** list on the **Materials** tab.
- 4 In the **Object's Materials** list, select the material(s) you want to change.

- 5 Click the **Material Picker** button  to activate the tool.
- 6 With the **Material Picker** tool, click the source object to pick one of its materials.
When you the **Material Picker** tool over an object, the material shows in the Inspector to the right of the **Material Picker** button.
- 7 Repeat steps 4 and 6 as necessary to change the other materials, one at a time.
Each time, the material picked replaces the selected material of the source object.
- 8 Click the **Material Picker** button again to deactivate the tool.

APPLYING LIGHTING

In a HGTV Home Design project, to make 3D scenes more realistic, you can have simulated light from the sun and moon as well as light from interior lamps and fire.

This chapter gives information about how you add and adjust light sources.

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About Light Sources

There are two types of light sources available in an HGTV Home Design project: natural light and artificial light.

How you adjust the light sources affects the quality of the project in the 3D view. The rendering quality of the light sources in the 3D view depends significantly on the settings in the **3D Settings** tab of the *Preferences* dialog box and the active choices in the **Rendering Quality** submenu on the **View** menu.

- To control reflections and shadows in the 3D view, you use commands on the **3D View ▸ Rendering Quality** submenu on the **View** menu or click a button on the 3D toolbar.
- To render light most realistically, show both lights and shadows by choosing **3D View ▸ Rendering Quality ▸ Lights & Shadows** on the **View** menu. You can also click the **Lights & Shadows** button on the 3D toolbar.



Without Lights and Shadows



Lights Only



Lights and Shadows

Adjusting Natural Light

The settings for natural light (daylight and cloudiness) are available on the *Environment* panel.

To open the *Environment* panel, choose **Show Environment** from the **Window** menu (Cmd-E). For detailed information about working with the *Environment* panel, see *Chapter 4: Using HGTV Home Design*.

Adding Interior Lighting

To add a lamp (or candle), drag it into your project from the **Lamps** category of Furnishing section on the *Library* pane. You add fireplaces from the **Fireplaces** category. See *Chapter 8: Adding and Adjusting Furniture* for detailed information about adding these objects.

Lamps, candles and fireplaces behave in almost the same manner as ordinary pieces of furniture except they have settings on the **Light Properties** tab of the Inspector. On this tab you can adjust the luminosity and color of each light source and turn it on or off.

If a lamp has several bulbs, you can usually control them separately, but this depends on the 3D model that you've added to your project.

Note: If your project has a lot of light sources, HGTV Home Design may render the 3D scene quite slowly when you are walking in it. If this occurs, only turn on lights and shadows if it's necessary. For more information, see Chapter 15: Solving Problems.

Managing Light Sources in the Inspector

The **Lights Properties** tab of the Inspector controls interior light sources. To open this tab directly, choose **Inspector ▸ Lights Properties** from the **Window** menu.

In the toolbar at the top of the tab, click a daytime button to specify phases of the daylight (**Morning**, **Day**, **Evening**, **Midnight**, or **Custom**). This setting affects the sunlight in the 3D view.

The **Lights** list in the Inspector has all light sources actually in the project by floor with the **Sun** always at the top of the list. Select a light to adjust its settings.

The bottom area of the tab shows the settings for the lights in the selected light source(s) in the **Lights** list.

To change the brightness of a light source, select it in the **Lights** list and drag the **Luminosity** slider.

To change the color, click the **Color** box and select a color in the Mac OS X *Colors* palette.

To turn the selected light on or off, click the **light bulb** icon.

To adjust several light sources together, you can select them in the **Lights** list and then change their settings.

A single lamp may have several light sources. If you select such a lamp in the **Lights** list, the Inspector displays the settings of each light source in the lamp. To adjust the multiple light sources for one lamp at the same time, select all those lines in the settings area.



PRINTING AND EXPORTING PROJECTS

With HGTV Home Design you can easily print a floor plan of your project. Additionally, you can export image files of the 2D and 3D views.

Chapter 13 at a glance:

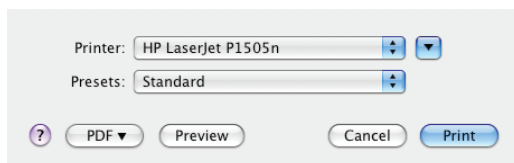
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Printing a Floor Plan

You can print your 2D layout (floor plan) of the currently showing storey. When you print a floor plan, the scale for printing is based on the scale specified on the **Measurements** tab in the *Project Setup* dialog box. Depending on the current scale, the floor plan may print onto several pages.

To print a floor plan:

- 1 In the workspace, specify which storey to print.
- 2 Choose **Print** from the **File** menu (Cmd-P).

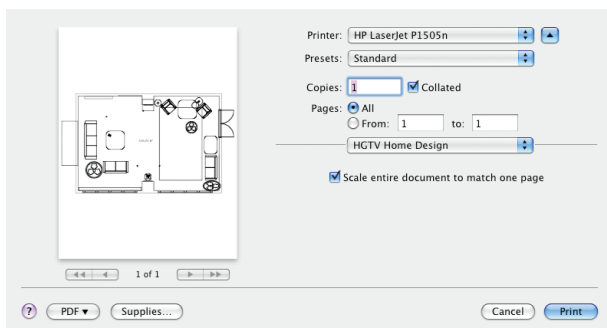


- 3 In the *Print* dialog box, make adjustments as needed— such as specifying which printer to use — or click **Preview**.
(For more options, click the **Expand** button next to the **Printer** pop-up menu. If you do so, a preview of the floor plan appears in the *Print* dialog box.)
- 4 Click **Print**.

If the floor plan prints onto several pages, you can force it to print onto one page.

To print a floor plan on one page:

- Before printing the floor plan, specify a different scale in the *Project Setup* dialog box. For example, if the floor plan printed on 4 pages at scale 1:50, change the scale to 1:200.
- In the *Print* dialog box, if necessary, click the **Expand** button. Then select the **Scale entire document to match one page** checkbox before clicking **Print**.



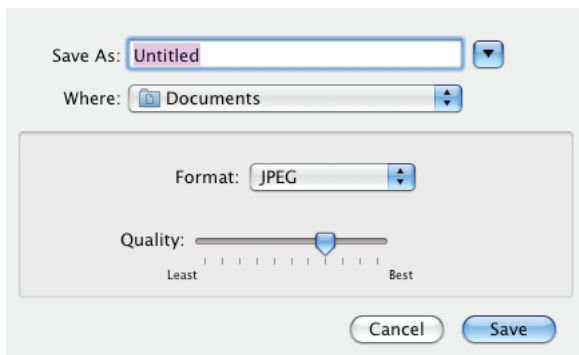
Exporting a Floor Plan

You can save your 2D layout as one of several types of graphic files: PDF, BMP, TIFF, JPEG or PNG.

As with printing, the scale used during the export process is based on the scale specified on the **Measurements** tab of the *Project Setup* dialog box.

To save your 2D layout as a graphic file:

- 1 In the workspace, specify which storey to export as a graphic.
- 2 Choose **Export 2D Plan** from the **File** menu.



- 3 In the *Export 2D Plan* dialog box, specify the image format.

- 4 If the select graphic format has an additional option, adjust the value as needed.
- 5 Type a name for the graphic file.
- 6 Specify where to save the file.
- 7 Click **Save**.

After HGTV Home Design saves the image, you can preview it. Click **View**. To return to the workspace instead of viewing the file, click **Continue**.

Exporting 3D Views

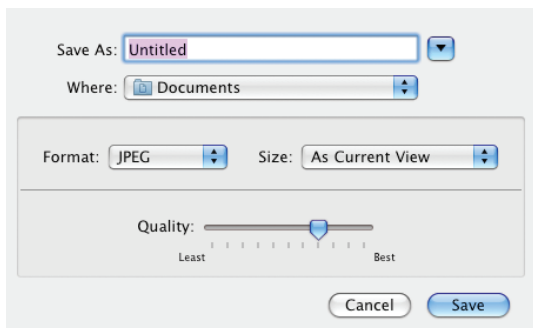
You can export the 3D view as a single graphic file or as a panorama.

Exporting a Single Image in 3D

You can take a picture of the currently showing 3D view.

To take a picture of the current 3D view:

- 1 Click the **3D View** button on the View toolbar.
- 2 Use the Walk Control and camera orientation tools to show the picture you want to shoot. (See *Chapter 4: Using HGTV Home Design* for details on using the Walk Control and adjusting cameras.)
Alternatively, select the camera pointing in the necessary direction in the **Camera** list on the **Cameras Properties** tab of the Inspector.
- 3 Choose **Export 3D View** from the **File** menu, or click the **Camera** button on the 3D toolbar.



- 4 In the *Export 3D View* dialog box, specify the image format (**BMP**, **TIFF**, **JPEG**, or **PNG**) and size.
- 5 If the select graphic format has an additional option, adjust the value as needed.
- 6 Type a name for the graphic file.
- 7 Specify where to save the file.
- 8 Click **Save**.

After HGTV Home Design saves the image, you can preview it. Click **View**. To return to the workspace instead of viewing the file, click **Continue**.

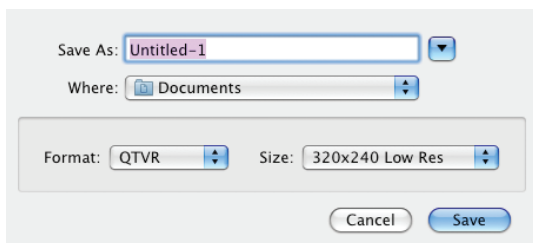
To print the 3D view, open the exported picture in Preview and print it.

Exporting 3D Views to QuickTime VR (QTVR)

You can save a 3D view in the QuickTime VR (virtual reality) format to have a panoramic view of your project from the point where you are “standing” in 3D. Then you can open the exported file in QuickTime and look in any direction.

To export as a QTVR file:

- 1 Click the **3D View** button on the View toolbar.
- 2 Walk to the central point of your panorama.
Use the Walk controls and camera orientation tools to establish the necessary point. Alternatively, select the camera pointing in the necessary direction in the **Camera** list on the **Cameras Properties** tab of the Inspector.
- 3 Choose the **Export 3D View** from the **File** menu, or click the **Camera** button on the 3D toolbar.



- 4 In the *Export 3D View* dialog box, specify QTVR as the image format
- 5 Specify the size of the image.
- 6 Type a name for the image file.
- 7 Specify where to save the file.
- 8 Click **Save**.

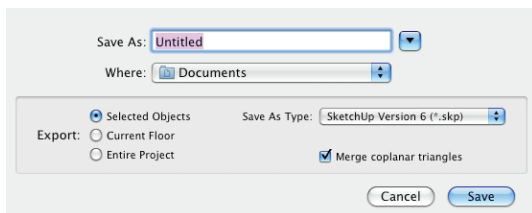
After HGTV Home Design saves the image, to preview it, click **View** and use the QuickTime Player features to view the panorama. To return to the workspace instead of viewing the file, click **Continue**.

Exporting 3D Files

You can export an object, a floor or the entire project as a Google SketchUp (*.skp), VRML Version 2.0 (*.wrl) or X3D (*.x3d) file.

To export a 3D file:

- 1 Select what you want to export in the project:
 - To export one or more objects, select them in the project.
 - To export a floor, activate it on the **Building Properties** tab of the Inspector.
 - To export the project, you don't need to select anything.
- 2 Choose **Export To** from the **File** menu.



- 3 In the *Export To* dialog box, select the output format in the **Save As Type** pop-up menu.
- 4 Select what you want to export: **Select Objects**, **Current Floor** or **Entire Project**.
- 5 For a Google SketchUp file, to simplify objects before exporting them, select the **Merge coplanar triangles** checkbox. To keep all the details, clear the checkbox.
- 6 Type a file name.
- 7 Specify where to save the file.
- 8 Click **Save**.

TAKING PICTURES AND MAKING MOVIES

In an HGTV Home Design project you can add cameras to take individual pictures or to make movies of the 3D view.

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Working with Cameras

Cameras are special objects. You use them to define specific locations in the 3D space for taking pictures. In HGTV Home Design you also use cameras as the starting point for walking around in 3D. By selecting a camera, you can quickly jump to a specified location at any time.

In each project, HGTV Home Design provides, by default, five cameras (views). Their locations are fixed, and you cannot remove them. They do not show on the floor plan, but you can select them in the **Cameras Properties** tab of the Inspector.

You can add more cameras to save your favorite points of view. Custom cameras behave in almost the same way as ordinary objects, and they are visible on the floor plan. You can change their direction, move them and delete them.

For example, one way to use custom cameras would be to take pictures of a room from three points, change the color of walls or change the furniture, take another series of pictures, and then compare the two pictures to choose the best color combination.

Managing Cameras in the Inspector

The **Cameras Properties** tab lists all the cameras in the current project: predefined, custom and movie cameras. To open this tab directly, choose **Inspector ▸ Cameras Properties** from the **Window** menu. If the Inspector is already showing, click the **Cameras Properties** tab

Unlike predefined cameras, you can add and remove custom cameras and movie cameras.

In the Inspector you can select any existing camera, including movie cameras. The selected camera defines what is displayed in the 3D view.

New cameras and movie tracks have default names. To change a name, double-click it and edit the name.

The **Cameras Properties** tab first lists the predefined cameras. Their quantity is constant. You cannot change their location in the 3D space.

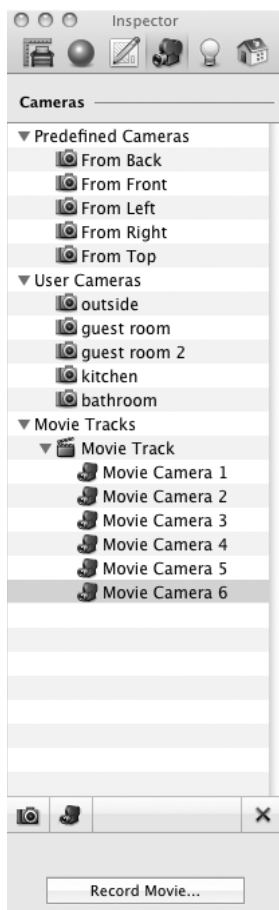
Each custom camera that you've added appears in the **User Cameras** list.

Each movie track you've added into your project appears in Movie Tracks list. Sub-items of each movie track are movie cameras (points on a track). For more information, see *Creating Movies* later in this chapter.

You use the toolbar in this tab to add, export or delete camera, movie tracks or movie cameras. These buttons are only available when the 3D view is visible.

Click the **Add Camera from 3D Viewpoint** button (the first button) to add a new camera. The location and orientation of the added camera corresponds to your current position and point of view in the 3D view.

Click the **Add Movie Track from 3D Viewpoint** (or **Add Movie Camera from 3D Viewpoint**) button (the second button) to create a new track or to add a movie camera to an existing movie track. If you select a movie track or a movie camera in the list, clicking this button adds a new camera to the current movie track. Otherwise, HGTV Home Design creates a new movie track.



To delete a selected camera, movie track or movie cameras, click the **Delete** button (X) .

If you've selected a movie track or camera, a **Loop Movie** checkbox appears on the toolbar. Select this to be able to loop a movie when you create it.

Click the **Export 3D View** button to export a picture from the current 3D view. This button is equivalent to choosing **Export 3D View** from the **File** menu. If you've selected a movie track, click the **Record Movie** button to start the process of creating a movie

Selecting a Camera

All predefined and user cameras are available in the **Cameras Properties** tab of the Inspector. Custom cameras also appear in the Project Tree.

To jump to a saved position in the 3D view, select a camera in the Inspector.

If you select a custom camera and walk around in the 3D view, the camera changes its location to reflect your current position. In this way you can adjust the location and direction of the camera.

To prevent the camera from accidentally moving, lock it in the Project Tree. Alternatively, click another object in the 3D view (a wall, for instance) to no longer have a custom camera selected before you start walking.

A camera icon in the top right corner of the 3D view indicates that a custom camera has been selected and that its position can change.



Adding and Deleting Cameras

To add a camera, use the **Camera** button on the 2D toolbar. (If the **Movie Track** button shows, click the arrow and then click **Camera**.)



While walking around in the 3D view, you may want to save some viewpoints to return to them later. To do this, click the **Add camera from 3D Viewpoint** button in the **Cameras Properties** tab of the Inspector.

All cameras you've added appear in the **Cameras Properties** tab of the Inspector and in the **Auxiliary Objects** group in the Project Tree.

To delete a custom camera, select it in the Inspector and click the **X** button at the bottom of the **Camera Properties** tab.

To rename a camera, double-click its name in the Inspector and type a new name. You can also rename and delete cameras in the Project Tree.

Moving Cameras in the 2D View

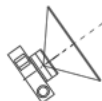
To move a camera, drag it, or you can select it and press the arrow keys. Doing this does not rotate the camera.



When selected, the camera has two handles: the front one (the upper dot on the picture) and the central one. If you drag the front handle, the camera turns around the central handle point and the camera's location stays unchanged. By dragging the center handle, you move and rotate the camera at the same time.

Adjusting the Viewing Angle of the Active Camera

The viewing angle (frustum) and the view direction of the active camera show in the 2D view. Use them to point a camera to some place or object.



If you drag the front handle, the selected camera turns around the central handle point. If you drag the center handle, the camera moves and rotates.

You can turn the frustum on or off by choosing **Show 3D Viewpoint** from the **View** menu.

Hiding Cameras

Cameras do not print in the floor plan, but while in the 2D view you may not want to see the cameras. To hide a user-defined camera, open the Project Tree, select the camera, and click the **eye** icon to make the camera invisible.

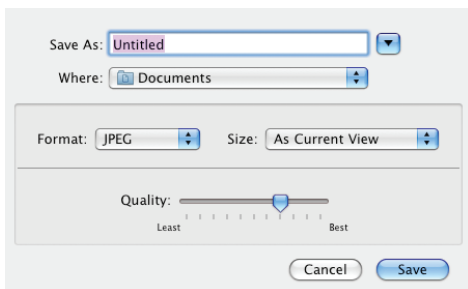
Taking Pictures of the 3D View

You take pictures of the project from the 3D view. You can use the predefined cameras or any custom camera that you've added to the project.

Note: To 'take a picture' of the 2D view, you export the floor plan as a graphic. For information see Chapter 13: Printing and Exporting Projects.

To take a picture of the 3D view:

- 1 If the floor plan is showing, click the **3D View** button on the toolbar or choose **Toggle 2D/3D View** from the **View** menu.
- 2 If the Inspector isn't showing, choose **Inspector** ➤ **Cameras Properties** from the **Window** menu. Otherwise, click the **Cameras Properties** tab on the Inspector.
- 3 In the Inspector, click either the triangle next to **Predefined Cameras** or **User Cameras** to show the available cameras.
- 4 Select a camera to use to take the picture.
That view shows in the workspace.
- 5 If that's the view you want, click the **Camera** button on the toolbar.
or
Choose **Export 3D View** from the **File** menu.



- 6 In the *Export 3D View* dialog box, specify the image format (**BMP**, **TIFF**, **JPEG**, or **PNG**).
- 7 Specify a size for the image.
- 8 If the select graphic format has an additional option, adjust the value as needed.
- 9 Type a name for the graphic file.
- 10 Specify where to save the file.
- 11 Click **Save**.

After HGTV Home Design saves the image, you can preview it. Click **View**. To return to the workspace instead of viewing the file, click **Continue**.

Note: You can also export the view as a panorama if you specify **QTVR**. See Chapter 13: Printing and Exporting Projects for details.

Creating Movie Tracks and Movies

You can create a movie as you walk through the 3D space. HGTV Home Design saves a movie as a MOV file.

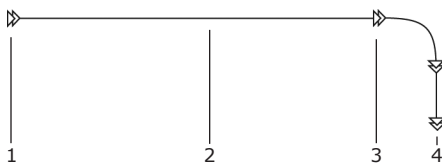
To create a panorama of the 3D space, see *Chapter 13: Printing and Exporting Projects*.

About Movie Tracks and Movie Cameras

Movie creation begins with creating a movie track — a path along which an imaginary video camera moves. You can place multiple movie tracks in your project and can edit a movie track at any time. To create a movie, you select a movie track and start by clicking the **Record Movie** button at the bottom of the **Cameras Properties** tab of the Inspector.

When you create a movie track, you place movie cameras in key points in the 3D space. A movie track must have at least one straight line but may have several straight or curved segments. The track runs over anchor points, which are the movie cameras. End points of the movie track are also movie cameras. HGTV Home Design creates the necessary intermediate points automatically.

Movie cameras appear on the floor plan as individual icons with two triangles. Interpolated points are represented by a line. The arrows in the movie camera icon define the direction of the camera's movement along the path.



In the example above, #1 is the beginning of the movie track (the first movie camera) and #2 shows the movie track. #3 is an intermediate movie camera, and #4 indicates the end of the movie track (the last movie camera).

Selecting a movie track

There are several ways to select a movie track:

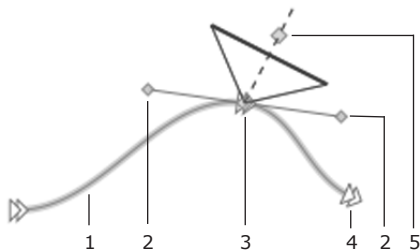
- Click a movie track in the 2D view.
- Click a movie track in the **Movie Track** category on the **Cameras Properties** tab of the Inspector.
- Click a movie track in the **Auxiliary Objects** category in the Project Tree.

HGTV Home Design indicates a selected movie track on the floor plan with a blue color.

Selecting a movie camera

To select a movie camera, click it on the floor plan, or select it in the list under the corresponding movie track on the **Cameras Properties** tab of the Inspector.

A selected movie camera may also define a point of view for 3D view as an ordinary camera. In this case, a viewing frustum (viewing angle, a blue triangle) next to it displays the direction of the camera.



In the example above, #1 is the selected movie track. The two points indicated as #2 are the camera control points for the selected camera (#3) with #5 as the camera direction point. #4 is a camera that is not selected

Creating a Movie Track in 2D

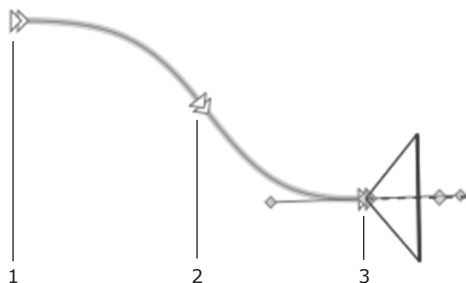
You can create a movie track in the 2D view.

To create a movie track:

- 1 Click the **Movie Track** button on the 2D toolbar. (If the **Camera** button shows, click the arrow and then click **Movie Track**.)



- 2 Click the floor plan where you want the movie track to begin (#1 in the picture below).
- 3 Make more clicks to add more movie cameras to the current track (#2).
- 4 Double click to place the last camera (#3).



You can change the location of movie cameras, the shape of track segments and the direction of camera after creating the track.

Important! *The number of movie cameras depends on how curvy a movie track should be. A less curvy track requires fewer intermediate cameras. A straight track requires only two cameras: at its ends. Do not add unnecessary intermediate cameras. Add extra intermediate cameras for a more accurate creation of a track with a complex shape.*

Creating a Movie Track in 3D

You can create movie tracks in the 3D view.

To create a movie track in the 3D view:

- 1 Walk to a point in 3D that is the start point for your movie.
- 2 Open the **Cameras Properties** tab of the Inspector and click the **Add Movie Track from 3D Viewpoint** button.
The icon of the button indicates the current mode.

Add Movie Track mode:

In this mode, clicking the button creates a new track and adds a new camera to it.



The icon of the button turns into the image below, indicating that new cameras will be added to the current track by clicking the button.

Add Movie Camera mode:

In this mode, clicking the button adds a new camera at the end of the selected track.



Note: For creating a new track none of the existing movie tracks should be selected. To clear the selection from a movie track, click the **Movie Tracks** title above the list of movie cameras.

- 3 Move in the 3D space to the next position.
- 4 If necessary, adjust the orientation, tilt and elevation of the camera.
- 5 Click the **Add Movie Camera from 3D Viewpoint** button in the Inspector.
- 6 Repeat steps 3 – 5 to add more movie cameras.

Adjusting a Movie Track

You can change the shape of a track on the floor plan by:

- moving cameras to new places;
- changing the shape of track segments between movie cameras (keeping the location of cameras unchanged).

To change the location of a movie camera, select a movie track and drag the camera to a new place.

To change the shape of a track segment without moving cameras, drag the camera control points around the corresponding camera.

You can see the view from any movie camera in the 3D view. To do this, select the camera in the **Camera Properties** tab of the Inspector. If you start walking around, the camera changes its location and direction correspondingly. In this way, you can adjust key points of the movie track.

A camera icon in the top-right corner of the 3D view appears when you've selected a movie camera. This indicates that if you walk in 3D, its position will change.



Creating a Movie

Once you've added a movie track to a project, you can create a movie.

To create a movie from a movie track:

- 1 Select a movie track.
- 2 Click **Record Movie** on the **Cameras Properties** tab of the Inspector.
- 3 Type the name for the new movie file.
- 4 Specify where to save the movie file.
- 5 Set the movie properties.
 - For better quality, specify a higher resolution and frame rate. Setting high resolution or high frame rate produces a larger movie file.

- Select a video codec (a method to encode and compress the video file). The H.264 codec provides better compression ratio, but requires QuickTime 7 or higher to play back. Select it for having a smaller file size at the same movie quality. Select the MPEG-4 codec for compatibility with more types of video players.
- Use the **Quality** slider to change the compression rate. If you set a higher quality, a lower compression rate is used.

6 Click **Save**.

After creating a movie, you can view it. Click **View** to play the movie or click **Continue** to return to the project.

Tip: *Creating movies with a long track or with high resolution may take a long time. You may want to select a minimum resolution and frame rate to create a preview movie. When you are sure that all the cameras are positioned well, create a better quality movie.*

Looping Movies

You can loop a movie track by placing the beginning and the end of the movie track at the same point. To do this, select a track, right-click (or Control-click) and choose **Loop Movie**. (You can also select the **Loop Movie** checkbox on the **Cameras Properties** tab.) HGTV Home Design automatically adds a new track segment to close the track.

If you remove the loop feature by clearing the **Loop Movie** checkbox on the **Cameras Properties** tab, the added segment disappears.

To play back such a movie, open it in QuickTime and choose **Loop** from the **View** menu. Then click the **Play** button.

Modifying Movie Tracks in 2D

You can make certain adjustments while creating a movie track or after creating it.

Setting the Camera Direction

You can point a new camera while adding it. Another way is to change the camera direction after the track is created.

To adjust the direction when creating the track:

- 1 Click the **Movie Track** button in the 2D toolbar.
- 2 Move the pointer on the floor plan where you want to place the first movie camera.
- 3 Press the mouse button and, while keeping the button pressed, move the mouse to change the camera's direction. Release the button when the camera is pointing in the correct direction.
- 4 Repeat steps 2 and 3 to add and adjust more cameras.
- 5 After adding the last camera, press the **Esc** key.

You can change the location of movie cameras, the shape of track segments and the direction of cameras after creating the track.

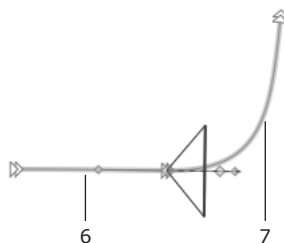
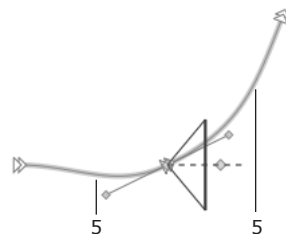
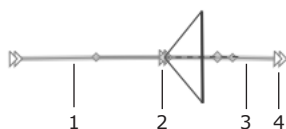
Keeping the Last Segment Unchanged

When you move the pointer while adding a new movie camera (#4 in the picture on the next page), the two track segments before and after the last added camera (#2), change according to the location of the pointer (#4). Segments #1 and #3 are straight. After the camera moves, they become curved (#5).

To keep a previously added segment unchanged, press the **Option** key while moving a new movie camera around to find a better place for it. This forces the previous segment (#6) to freeze when a new segment (#7) reshapes as it follows the pointer (new movie camera).

To adjust the camera without affecting the previous segment:

- 1 Add one or more movie cameras to a movie track.
- 2 Add another movie camera to your movie track by clicking in the layout.
Do NOT move the pointer.
- 3 Press the **Option** key and move the pointer where you want to place another movie camera.
- 4 Click the floor plan to place a new camera.
- 5 Release the **Option** key, or keep it pressed to continue using the current mode.



Setting the Shape of the Current Segment

You can adjust the curvature of the last track segment while adding a new movie camera. Alternatively, use the camera controls after the track is created.

To set a segment's shape:

- 1 Add one or more movie cameras to the movie track.
- 2 Click the point on the floor plan where you want to place another movie camera, but do NOT release the mouse button.
3. Press the **Option** key and move the pointer around the camera to adjust the shape of the track segment.
The direction of the camera stays constant.

- 4 Release the **Option** key.
- 5 Continue adding new movie cameras, or finish the process by pressing the **Esc** key.

The location of movie cameras, the shape of track segments and the direction of cameras can be changed after creating the track.

Adding Movie Cameras to an Existing Movie Track

You can add movie cameras to an existing track.

To add a camera to the end of a movie track:

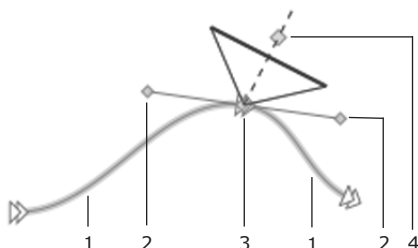
- 1 Select a movie track by clicking on it on the floor plan.
- 2 Click the **Movie Track** button in the 2D toolbar.
- 3 Click the last camera of the selected track.
- 4 Click somewhere else on the floor plan to add new movie cameras.

Another way to add cameras at the end of a movie track is to double-click the track in the 2D view. Then click the floor plan to place new movie cameras.

To add a new movie camera *before* or *after* some specified camera on a movie track:

- 1 Select the existing camera.
- 2 Right-click (or Control-click) the selected camera and choose **Add Movie Camera After** or **Add Movie Camera Before**.

Changing the Location of a Movie Camera



To change the location of a camera:

- 1 Click a camera in 2D to select it.
- 2 Drag the handle (#3 in the picture above) to move the selected camera to a new location.

Adjusting the Direction of a Movie Camera

You can change the direction of any movie camera in an existing movie track.

To change a camera's direction:

- 1 Click a camera in the 2D view to select it.
- 2 Drag the camera's direction handle (#4 in the picture above) to rotate the selected camera.

Adjusting the Curvature of Segments

You can adjust the track segments (#1 in the previous picture) located next to a specific movie camera (#3)

To adjust segments:

- 1 Click a camera in the 2D view.
- 2 Drag the camera's control handle (#2) to modify the shape of the track segments.

Removing Movie Cameras and Movie Tracks

Removing a Movie Camera

To remove a movie camera, select it on the floor plan by clicking and then press the **Delete** key.

To remove a camera with the Inspector:

- 1 Open the **Cameras Properties** tab of the Inspector.
- 2 Click the triangle next to the **Movie Tracks** category to expand it.
- 3 Expand a specific movie track to see all the movie cameras for that track.
- 4 Select a camera and click the **Delete** button (X) below the list of cameras or press the **Delete** key.

You can also right-click (or Control-click) a camera and choose the **Delete Movie Camera**.

Removing a Movie Track

To remove a movie track, select it on the floor plan by clicking (click the line, not a movie camera) and press the **Delete** key.

To remove a track with the Inspector:

1. Open the **Cameras Properties** tab of the Inspector.
2. Click a triangle next to the **Movie Tracks** category to expand it.
3. Select a specific movie track and click the **Delete** button (X) in the Inspector or press the **Delete** key.

You can also right (or Control-click) the track and choose the **Delete Movie Track**.



SOLVING PROBLEMS

This chapter includes a variety of tips and answers to questions that you might have about HGTV Home Design.

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General Troubleshooting

I cannot start HGTV Home Design

There are several reasons why HGTV Home Design may not start.

- HGTV Home Design cannot find its files or folders, or the files are damaged.

Solution: Re-install HGTV Home Design. Before you re-install the application, uninstall it by choosing **Uninstall** from the **HGTV Home Design** menu. Minimally, select the first three checkboxes and click **Uninstall**. See *Chapter 2: Installing HGTV Home Design* for details. When you re-install the application, use the default locations.

- Incorrect settings were saved in the program's preferences file.

Solution: Delete the preferences file `com.novadevelopment.HGTVHomeDesign.plist` from the `~/Library/Preferences/` folder.

- HGTV Home Design cannot open a corrupted document.

Solution: If HGTV Home Design doesn't start when you double-click a project file (*.li3d file), open HGTV Home Design from the *Applications* folder. Then try to open the document from within the application.

I cannot select an object

The object you cannot select may be locked.

Find the object in the Project Tree and see if it is, indeed, locked. Select the object in the Project Tree.

If you want to modify or move the object, click the **Lock** icon in the Project Tree to unlock the object.

My system seems to slow down when using HGTV Home Design

Walking around in 3D affects system performance. The following settings affect the application's performance.

Parameter or Property	Where to Change	Set To	Affected View
Rendering Quality	View menu 3D View ▶ Rendering Quality submenu	Without Lights & Shadows or Lights Only	3D
Decrease Quality when Moving (does not increase the speed of walking when Rendering Quality is set to Without Lights & Shadows)	<i>Preferences</i> dialog box 3D Settings tab	No Lights & Shadows	3D
Full Scene Anti-aliasing	<i>Preferences</i> dialog box 3D Settings tab	Set a lower value or None (not all video cards support this mode)	3D
Textures Filtering	<i>Preferences</i> dialog box 3D Settings tab	Bilinear (setting None can make the quality of the 3D picture unacceptable)	3D
Shadow Casting Lights	<i>Preferences</i> dialog box 3D Settings tab	Nearest 2 or Nearest 4	3D
Cast Shadows (turn off shadows of unimportant objects, and where the shadow is invisible because of the object's location)	Inspector Object Properties tab	Off	3D
Animate Library 3D Preview by Default	<i>Preferences</i> dialog box Miscellaneous tab	Off	2D and 3D when the library is shown

Parameter or Property	Where to Change	Set To	Affected View
Number of open views	-	Do not open the 2D and 3D views at the same time	2D and 3D
Light from lamps, candles and fireplaces (Turn off light sources that are unimportant for the current 3D scene.)	Inspector Lights Properties tab in the Lights list	Off	3D
Rulerlines	View menu Show Rulerlines	no checkmark	2D
Rulers	View menu Show Rulers	no checkmark	2D

In general, to speed up 3D rendering:

- Use as few materials as possible in a project.
- Use fewer different objects.

For example, if you have two copies of a chair in the project.

HGTV Home Design uses one model for both of them.

If you change the parameters of one chair in the *Type & Representation* dialog box, HGTV Home Design creates a new model for this modified chair. Now, the project has one more object model in it although the actual number of objects in the 3D scene hasn't changed. Editing an object in SketchUp creates a new model, too.

I have red circles on the floor plan

Every red circle on the floor plan indicates a place where wall segments are joined incorrectly. A bad joint may cause problems when creating automatic floors and ceilings, displaying the affected walls in the 3D view, and other problem.



To fix the problem, move a segment aside and then return it to its place. If this doesn't help, delete the affected segments and add them in again.

I'm having problems printing projects

The printer does not print:

- If the printer is connected to your Macintosh computer or network box with a cable, check the cable connections.
- Make sure the printer is turned on.
- If you have several printers available to use, make sure that you've selected the correct printer in the *Print* dialog box.
- Check the paper source for the selected printer. Some printers have several input trays and the wrong one may be indicated in the *Print* dialog box. If necessary, click the **Expand** button next to the **Printer** pop-up menu to access other printer settings.
- Make sure paper is properly loaded into the printer.

If the printed text or images are low quality (light stripes or gaps on the printout, faded, wrong colors), check the ink or toner level.

If the printout is blurry, or ink takes too long to dry:

- Make sure the paper meets the printer's requirements.
- Check if the correct side of the paper is used.
- Check if the proper paper type is selected in the printer settings.

To understand the cause of a printing problem, make a test print with a document in another application. If the problem persists, it's more likely that the problem is related to the printer.

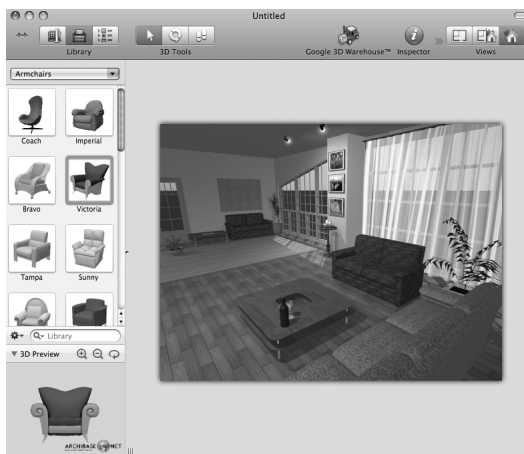
For more detailed troubleshooting information, refer your printer's documentation.

The 3D View is too small

The 3D view doesn't fill the available space, or it doesn't expand by resizing the main window.

Unlike the 2D view, the size of the 3D picture is limited by the amount of the video memory (VRAM) in your Macintosh computer. To find out whether the problem is related to the memory limitation (normal behavior), look at the 3D picture for a blank document.

The 3D view should appear on a plain gray background and should have a shadow along two or more opposite borders. When you make the main window smaller, the 3D picture may take all the space in the view area. In this case the gray background and shadow disappear.

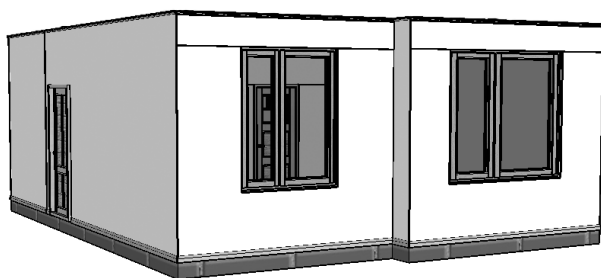


When I export a project as a SketchUp file it has unwanted triangles

An incorrectly exported SketchUp model looks like this:



A correctly exported model looks like this:



To solve the problem, choose **Preferences** from the **HGTV Home Design** menu (Cmd-.). Click the **3D Settings** tab and, then, in the Shadow Technique area, select **Stencil Shadows**. Click **OK** and then re-export the file.

My project appears too dark in the VRML player

This can happen if the player supports a limited number of simultaneous light sources. The VRML 2.0 specification requires support for at least eight light sources. If a VRML file appears much darker than your project in the 3D view in HGTV Home Design, try to turn off some light sources and export the VRML file again.

Different VRML players support different number of light sources. For example, some players normally work with seven (or fewer) light sources.

Note: *The spotlight in a VRML player should also be considered as a light source. By turning it on, you may exceed the limit.*

Video Card Limitations

HGTV Home Design has some hardware limitations.

Video cards that do not support per-pixel lighting

The following models (and earlier versions) don't support per-pixel lighting:

GeForce4 Ti , GeForce3, GeForce2 MX/4 MX, Radeon 9000/9200, Radeon 8500, Radeon 7200/7500, and Radeon 7000.

To find out which video card is in your computer, open the **Apple** menu and choose **About This Mac**. Then click the **More Info** button to open the system profiler. Then click **Graphics/Displays** in the **Hardware** section.

Contacting Technical Support

For viewing frequently asked questions (FAQs) and troubleshooting tips, visit:

<http://www.novadevelopment.com/support/>

You can send a message directly to the technical support staff from this page. When reporting a problem, please specify:

- The version of HGTV Home Design you are using
- The version of Mac OS X installed on your computer
- The previous actions that could have lead to the problem

If the problem is repeatable:

- Describe how to reproduce it.
- If possible, illustrate your report with screenshots. (Press **Cmd-Shift-3** to save a screenshot on your Desktop.)

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