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Google SketchUp

Preferences

When you start SketchUp for the first time, there are some settings that need to be changed.

Windows

Click on the **Windows** tab and then select **Preferences.**

- Under **Drawing** sub-menu make sure that **Auto-Detect** is on and that you have a check mark in front of **Continue Line Drawing.**
- Under **Extensions** sub-menu make sure that you have a check mark in front of **Ruby Script Examples**, **Utilities Tools**, and **Sandbox Tools.**
- Under **General** sub-menu make sure that you have a check mark in front of **Create Backup**, **Auto-Save Every 5 Minutes**, **Automatically Check Model For Problems**, **Automatically Fix Problems When They Are Found.**
- Under **OpenGL** sub-menu make sure that you have a check mark in front of **Use Hardware Acceleration (new computers only)**, **Use Fast Feedback.**
- Click **OK.**

View (Windows)

Under Toolbars, make sure that these are turned on.

- Camera
- Construction
- Drawing
- Display Style
- Modification
- Principal
- Standard
- Views
- Walk Through
- Sandbox

Mac

Click on the **SketchUp** tab and then select **Preferences**

- Under **Drawing** sub-menu, the **Click Style** should be set to **Auto detect** with a check mark in front of **Continue line drawing**. The **Miscellaneous** sections should have a check mark in front of **Auto-activate paint tool**.
- Under **Extensions** sub-menu make sure that you have a check mark in front of **Ruby script examples**, **Utilities tools**, and **Sandbox tools.**
- Under **General** sub-menu make sure that you have a check mark in front of **Create backup**, **Auto-save Every 5 minutes**, **Cascade main windows**, **Automatically check model for problems**, **Automatically fix problems when they are found.**
- Under **OpenGL** sub-menu make sure that you have a check mark in front of **Use Hardware acceleration (new computers only).**

View (Mac)
Under the **View** menu, select **Customize Toolbar** . . . Now drag the following tools to the toolbar area:

- Standard Views
- Undo/Redo
- X-Ray Mode

Under the **View** menu, select **Tool Palettes** and make sure that there is a check mark in front of **Large Tool Set** and **Sandbox**.

Tools

- **Click-Drag-Release**: Using the **Pencil** tool, **Click** at the beginning of your line and hold the left button down while you **Drag** out your line. Then **Release** your left button. **Note: Although you can **Click**-**Drag**-**Release**, it is not recommended for use in SketchUp**
- **Click-Move-Click**: Using the **Pencil** tool, **Click** at the beginning of the line. **Move** where you want the line. Notice that you have a **Rubber Band** line following you. Then **Click** at the end, where you want the line to stop. You will still have a **Rubber Band** attached so you will need to hit the **Esc** Key on your keyboard to release it.


Pencil Tool – used to draw lines and edges.


Undo – SketchUp has unlimited numbers of undo and re-do.

Esc The **Esc** key un-does something already in progress and the **Undo** button cancels last thing done.

VCB The **Value Control Box** is where the length and sides are controlled.

Edge The **Edge** is the border of the object. The **Edge** has **Endpoints** and a **Midpoint.**

Surface When an object is completely enclosed the **Surface** is filled in with a color.

Heal Retrace one of the **Edges** to complete the object again.


Eraser tool used to remove surfaces and edges.


Selection tool used to select items.


Polygon tool used to create polygons of different sizes and shapes. After drawing the shape, you can type the number of side followed by the letter “s” to change how many sides the polygon has. You can also change the length of each side.


Circle tool is used to draw circles. The default is 24 sides.


The **Arc** tool is a three click tool. The First click starts the beginning point, the second click sets the end of the arc, and the third click set how big the arch is.

The **Rectangle** tool creates rectangles.

The **Freehand Drawing** tool is one of the few tools that uses the Click-Drag-Click method of drawing.

The **Move** tool allows you to move, stretch and copy shapes. This tool can also be used to rotate components and groups.

The **Pan** tool is for navigation without a three button mouse. If you don't have a three button mouse, it is recommended that you purchase one. If you hold in on the scroll wheel while pressing the shift key, SketchUp will allow you to pan.

The **Orbit** tool is for navigation without a three button mouse. If you press in on the scroll wheel, SketchUp will allow you to orbit in 3 dimensional space.

The **Zoom** tool is for navigation without a three button mouse. If you scroll the wheel forward, you will zoom in and if you scroll the wheel backwards, you will zoom out. SketchUp will zoom to where your curser is.

The **Push Pull** tool allows you to push or pull objects into 3 dimensional shapes. You can make one object the same height as the one next to it by moving you curser over the second object and clicking on the top on it. This will make the other object the same height. You can also use the **Push Pull** tool to push a shape completely through the object and basically cut a hole into it.

Auto Fold The process of skewing, distorting, or folding shapes by selecting a specific point on an edge or face and moving the points.

On the PC, hold down the **Alt** Key with the **Move** tool selected. On the Mac, hold down the **Apple** Key with the **Move** tool selected.

The **Offset** tool creates copies of coplanar lines and faces that are a uniform distance from the originals.

Component Components are models that are saved as SketchUp files for reuse in other SketchUp files. Use the **Make Component** menu item from the **Edit** menu to create a component from the currently selected entities. **Editing a Component** is as easy as right clicking on the component and selecting Edit. Now any changes that you make will happen to all of the same components. When you are done with your edits, right click off in white space and select close component.

Copy To make a copy of a component, hold the **Ctrl** key down and with the **Move** tool click, move, click on the component.

Array Multiple copies of an object that are placed with an equal distance between each copy. Type the number of copies that you want followed by the letter “x”.

Adding Component Click on **Windows** and select **Components**. In the **Components**’ window, click the dropdown window and you can choose from the selection of items there.

Adding Materials If you click on the **Paint Bucket**, the **Materials** window opens up and you can add all sorts of things like: Roofing, Stone, Vegetation, etc.

Resources

SketchUp web page - http://www.sketchup.com/
General Use Questions - http://sketchup.google.com/support/bin/topic.py?topic=8538
Using SketchUp tools - http://sketchup.google.com/support/bin/topic.py?topic=8789
Advanced Techniques - http://sketchup.google.com/support/bin/topic.py?topic=8790
Using SketchUp with Google Earth - http://sketchup.google.com/support/bin/topic.py?topic=8539
Using 3D Warehouse - http://sketchup.google.com/support/bin/topic.py?topic=8589
Using SketchUp Pro LayOut - http://sketchup.google.com/support/bin/topic.py?topic=9267
Toolbar and Tool Palettes (PC & Mac) - http://sketchup.google.com/support/bin/topic.py?topic=12040
Menus - http://sketchup.google.com/support/bin/topic.py?topic=12039
Drawing Window - http://sketchup.google.com/support/bin/topic.py?topic=12037
Drawing Axes - http://sketchup.google.com/support/bin/topic.py?topic=12037

Users Guides

PC Versions - http://sketchup.google.com/gsu6/help/gsuwin.html
LayOut - http://download.sketchup.com/sketchuphelp/gsulo6_win/lowin.html

Mac Versions - http://sketchup.google.com/gsu6/help/gsumac.html
LayOut - http://download.sketchup.com/sketchuphelp/gsulo6_mac/lomac.html

Self-paced Tutorials

Go to www.sketchup.com and click on the **Training** tab, then click on the **Self-Paced Tutorials** tab.

Video Tutorials

http://sketchup.google.com/vtutorials.html

3D Warehouse

The Google 3D Warehouse is an online repository of 3D models.
http://sketchup.google.com/3dwarehouse/

DVD

http://www.go-2-school.com