

MY SKETCHUP BASICS

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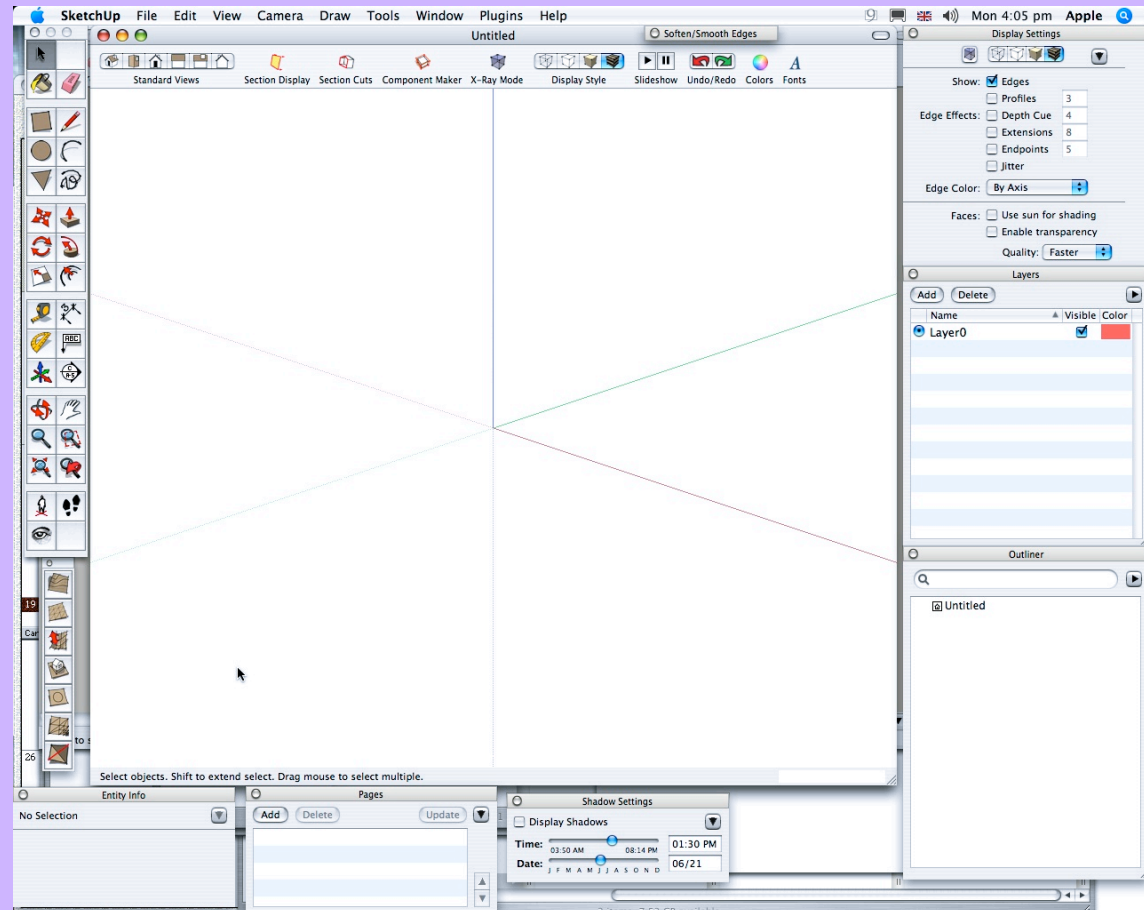
Whether or not you've ever used SketchUp before; follow this little tutorial and you will learn a few things that will make a big difference to your modelling in the future. It combines tips from other users along with a trick or 2 that I've discovered myself. I use this method every time. Before I discovered it I got myself in a mess from time to time, now I don't. Once you understand the reasoning behind this method you can adapt it to your own needs. I'm only familiar with the SU pro Mac version but, to the best of my knowledge, this tutorial is universal (please let me know if it is not). There are a number of keyboard shortcuts that I use but I've not mentioned them in this tutorial; instead I've used menus throughout. Here I'm going to show you how to create a template for a basic carcass. Open a new window in SU. Click on the 'Iso' button in the standard views (or: Camera>Standard>Iso).



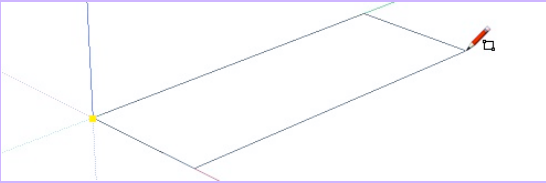
Invariably it is easier to draw in this view.

Make sure that the axis are visible (View>Axis).

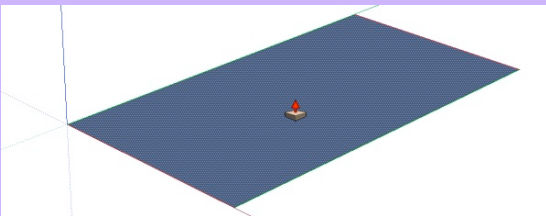
Go to: Window>Model Info>Units and select your preference (I have: Decimal, Millimetres, Precision: 0mm). In the Window menu open the 'Layers'; 'Display Settings' ('Styles' in pro6); 'Pages' ('Scenes' in pro6) and the 'Entity Info' windows. Position them where you want as you're going to keep them permanently open.



Choose the rectangle tool and, starting from the point where the three axis meet, draw a rectangle



between the red and green axis followed by the desired dimensions (550,1000) and press return. Now use the mouse wheel to adjust your view if you need to (or select the Zoom tool and drag it up or down the page).



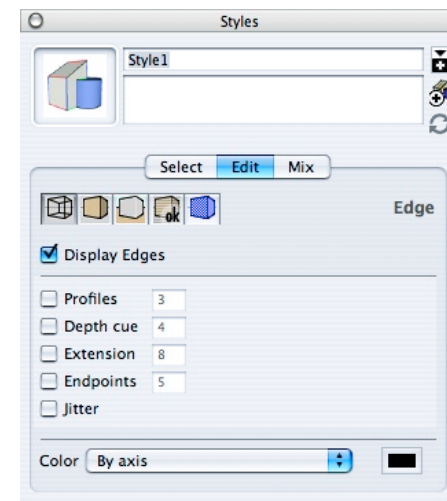
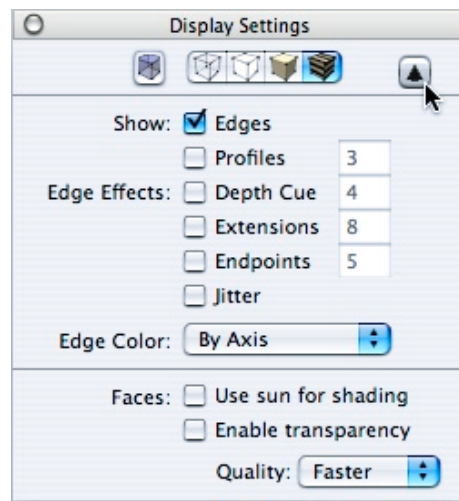
Select the Push/Pull tool; drag the rectangle up any distance then type the height that you want (2200) and press return.

Select the 'Orbit' tool and adjust your view, if you need to, then click on 'Zoom Extents'.

In the Layers window: click 'Add' you will see 'Layer1' appear. Type 'Carcass' to name it then click 'Add' again and type 'Outline'. You now have 3 layers. Notice the little radio

button selected next to Layer0. This means that it is selected as the active layer: All new geometry is drawn here. The golden Rule is to **ALWAYS KEEP LAYER ZERO AS THE ACTIVE LAYER** (there are times for rules to be put aside but there have been very few occasions when I have done this). Next: Edit>Select All, then Edit>'Make Group'; now while the group is still selected; move it to the Outline layer: in the 'Entity Info' window: select 'Outline' in the drop down menu. To make the object into a skeleton: double click on it and then in the 'Display Settings (or Styles)' window: uncheck the 'Edges' and 'Profiles'

boxes. Now, 'Select All' and press backspace; this will delete the faces. Now put the tick back into the Edges box and then click once outside the group so that it is de-selected. In the top right of the display settings (or Styles) window there is a triangle arrow pointing down; click on it to extend the window and then choose 'By Axis' in the 'Edge Color' menu. As you can see the edges of the drawing are now the same colour as the axis that they are parallel to, this is a sure way of seeing that your lines are how you want them. Next we're going to create four pages: Whilst you still have the outline in full view; uncheck the 'Visible' boxes



If you are using the pro6 version; Display Settings have been replaced by Styles.

next to the Carcass and Outline layers in the Layers window. You should now only see the axis. In the 'Pages' window click 'Add'. Now tick the visibility next to Outline in the 'Layers' window and de-select 'Axis' in the 'View' menu; then click 'Add' again in the 'Pages' window. This will create page2. Next, untick the Outline and tick the Carcass in the Layers window (you should now have a completely empty window) and then 'Add' another page. Lastly; create Page4 with all three layers visible. You will see that along the top of your window you have buttons for each page, you can toggle between them as you wish. If you like you can re-name them in the 'Pages' window; just click on the arrow to extend this window in the same way as you extended the 'Display Settings' window. You might want to create another page with Edge Colour as 'Default'.

Select page2: Trace over the near side of the outline by dragging the

rectangle tool between 2 opposite corners. Next, with the push/pull tool; drag the rectangle that you have just drawn away from you and then type 18 and press return.

Select Page1: The only thing visible is the side that you have just drawn. 'Select All' then 'Group' and whilst it is still selected choose 'Carcass' in the Entity Info window, the side will seem to disappear.

Select Page4: Copy/move the side (see below) then, if you had to zoom in, just click again on Page4

to return to full view. De-select the object.

I've now covered the important fundamentals of this method. You can now draw the bottom and copy it to the top and then draw the back. When you've done this you can save it as a template.

Whenever you have drawn a new object; click on Page1, this will hide everything else so that you can 'Select All' and 'Group' very swiftly. You then move it to another layer straight away.

Select the side and then the 'move' tool. To copy the side; Press and release the Ctrl key (windows) or Option key (Mac) then hover the move tool over a point that you can position precisely after moving (zoom in as necessary) then click and move into position, when it is in position let go of the mouse button.

