How do we make InteriCAD-friendly sketchup models?

1. Why do we import sketchup models into InteriCAD?

InteriCAD is professional interior design software. To meet needs of using designer's own models, we developed sketchup model importing function. For one thing, designer can get their favorite models on website or from furniture factory, and use them in their own design. For another, they can collect different models to enhance their library.

2. Note for sketchup model importing

As InteriCAD and Sketchup have different modeling mechanism, to avoid importing error, we recommend our users to import furniture models to make their own design. Very large, very tinny or complicated models are not recommended, because these models will bring lots of surfaces and data which can easily eat up computer resource and lend to crash.

Avoid items：

A. Massive data.
   Sketchup files are so large that the resource of system is eaten up, e.g. a file with 10MB.
B. Long triangles with very sharp acute angle.
   Sketchup will automatically separate any plain shape into two triangles, so a very long and thin rectangle will be separated into two triangles with a sharp acute angle and a long side
C. Very huge surface, e.g. a football ground or a large shopping mall.
D. Very tiny triangles, e.g. a tree with lots of tiny leaves.

3. Common problems on successfully importing models

A. Only surfaces can be selected after explode

Sketchup models will be imported into InteriCAD with its own properties. InteriCAD will recognize a "Component" from sketchup as a whole object. So if we want to select object other than surface, we need to make different parts as "Component" when we modeling in Sketchup. In the following part, we'll talk about how to avoid surfaces in InteriCAD.

B. Textures on different parts are a whole group

Regarding texture, InteriCAD will separate textures by name. If all parts got the same name during modeling, we'll get a whole texture in InteriCAD. So this is a key point in sketchup modeling. To avoid this problem, we need to define different texture name for different part,

even though some parts use the same texture temporary. In the following part, we'll talk about how to avoid surfaces in InteriCAD.

C. Inversed surface

This is due to different modeling mechanism of Sketchup and InteriCAD. As we know that, all sketchup models are single-surface. No matter how big the surface is, if it's rectangle, there would be two triangles. If it's pentagon, there would be three triangles, and so on. While InteriCAD has its own precision system, the model would be rebuilt when imported. So there would be several surfaces in InteriCAD, and some of them are inversed.

Note: If this problem happens, we could use "Surface Orientation" function to fix inversed surface easily in InteriCAD.

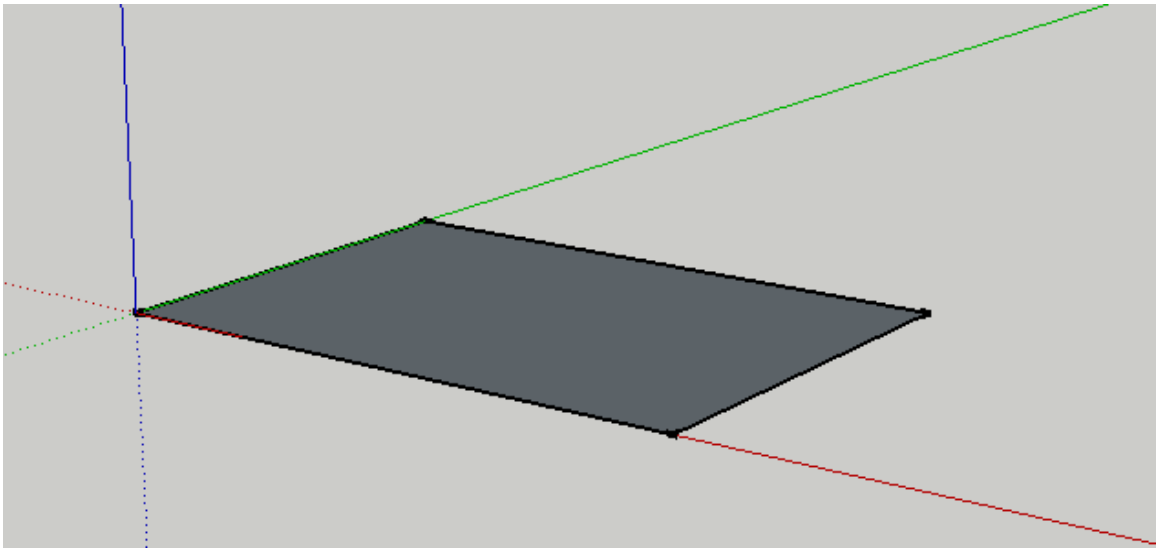
D. Broken surface

Models with very tiny surface or abnormal surface can get this problem easily. InteriCAD would filter them according to its own precision system. Some of them may cause system crash during importing.

4. How do we make InteriCAD-friendly sketchup models?

Let's take a dining table as an example.

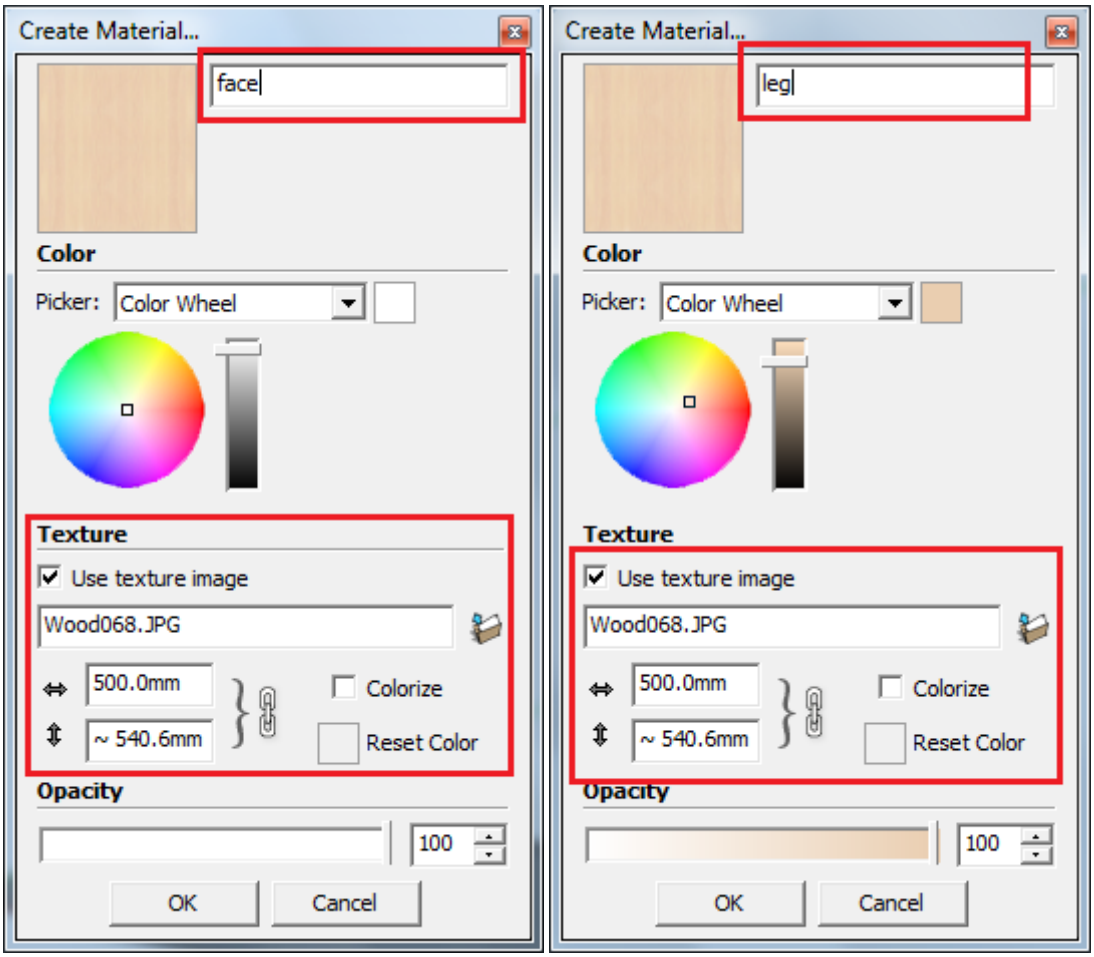
A. Draw dining table surface shape first.



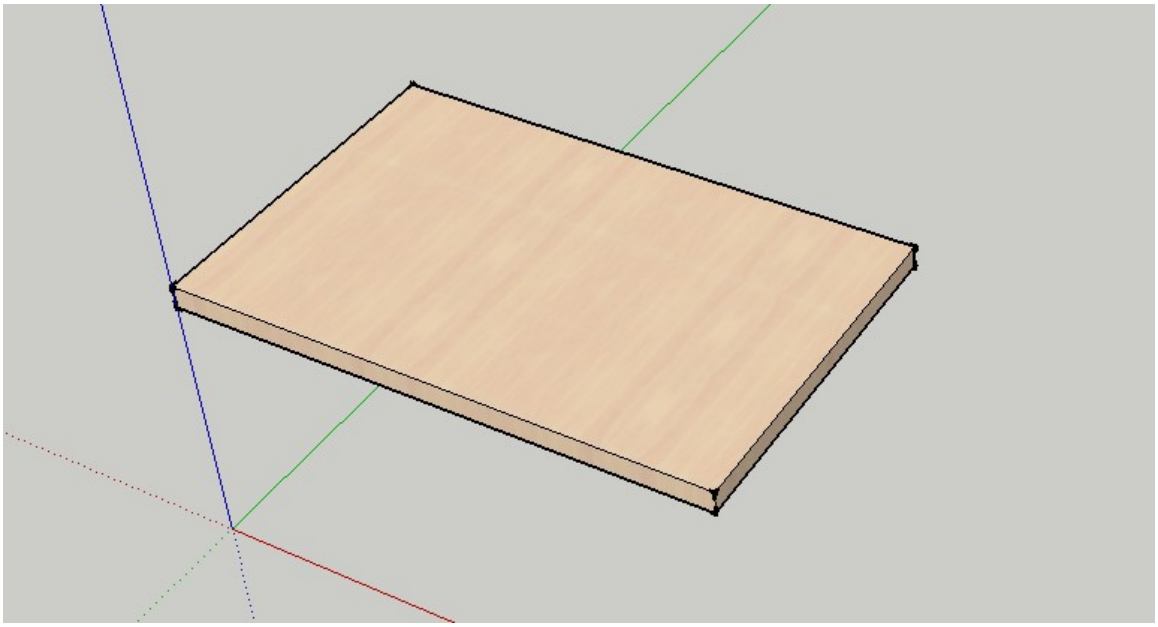
B. Create new texture

Now dining table surface and legs are using the same texture. We may want to separate them in the future. So we need to create two textures which will use the same texture map,

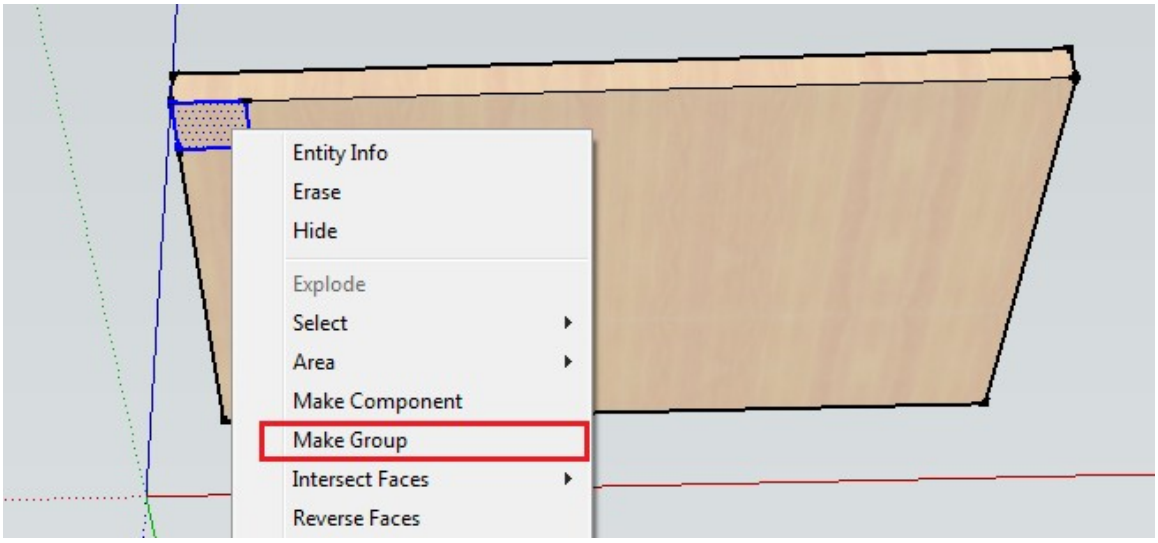
while have different names. As you can see from the following pictures, “face” is for table surface, while “leg” is for table legs.



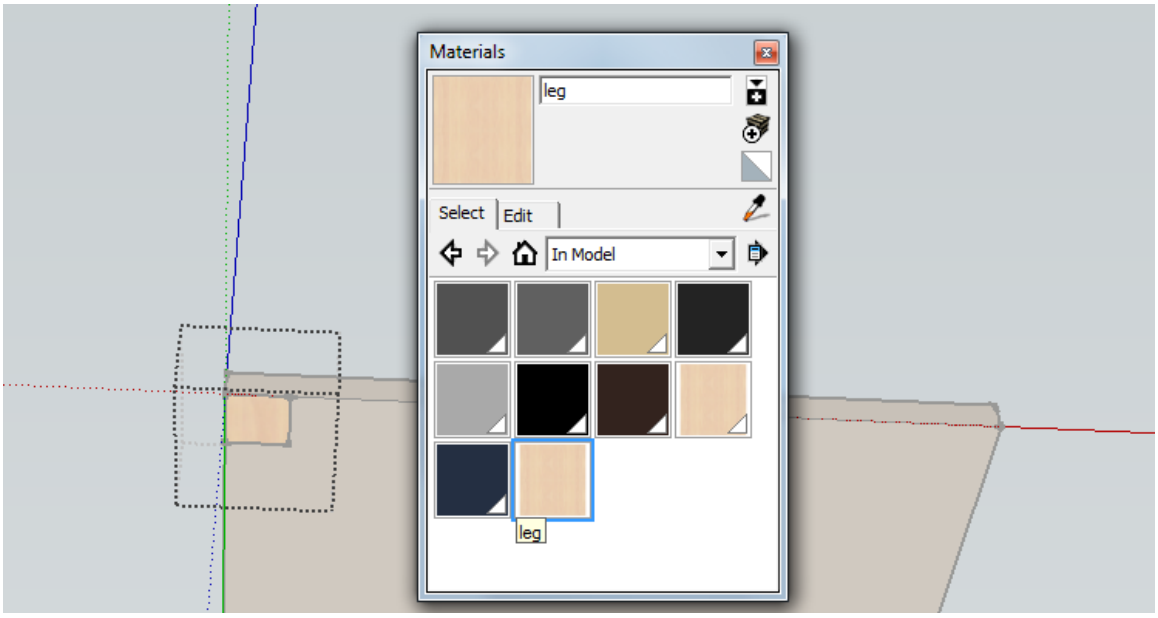
C. Apply “face” texture to table surface shape and extrude to get table surface.



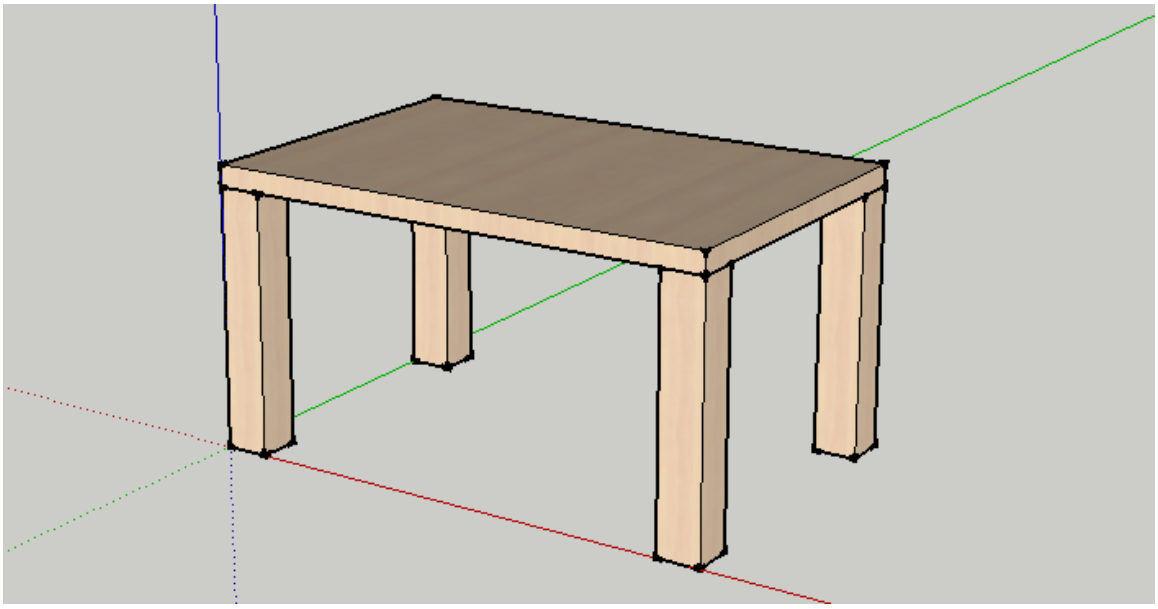
D. Use the same way to draw rectangle shape for table legs. To make operation easier and more convenient, we could use “Make Group” function to make rectangle face and lines as a group. What we need to do is double click the shape and right click to select “Make group”.



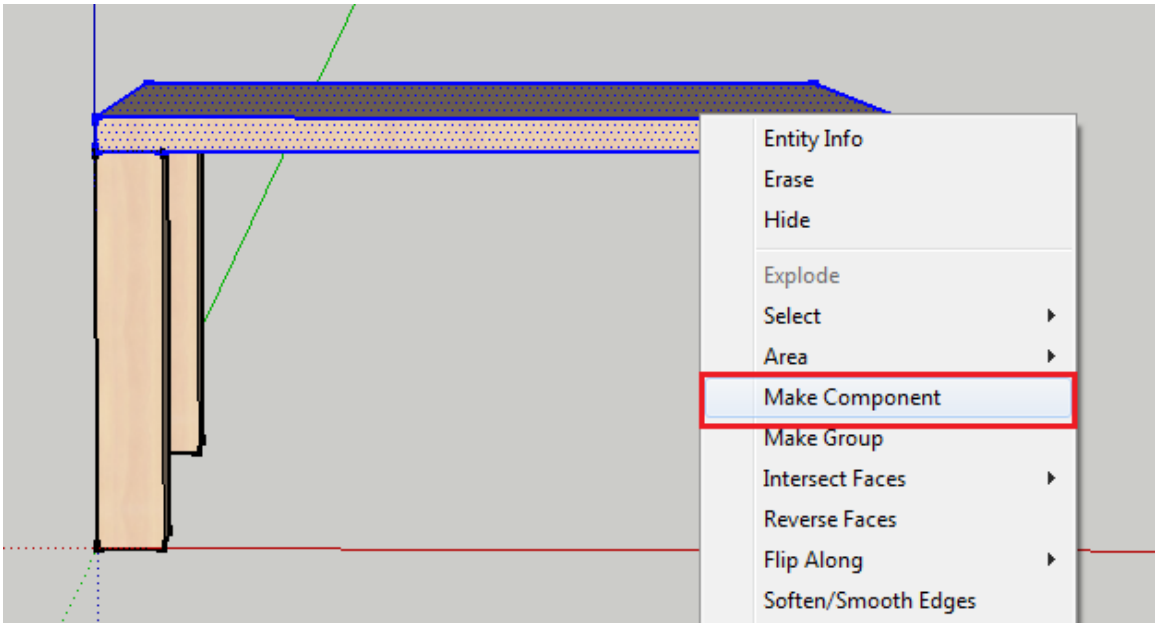
E. Double click to select the group and apply “leg” texture to the shape. Actually, it could save lots of steps if we apply texture first. Because we don’t need apply to all surfaces one by one after extrude. The extrude part will get the texture from the rectangle shape automatically.



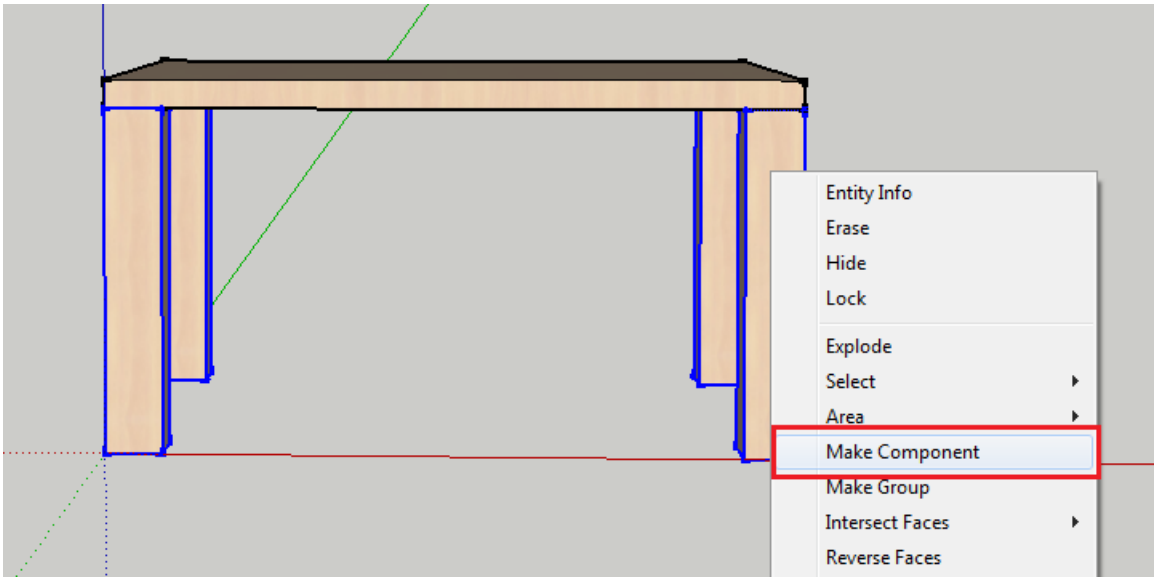
F. Extrude to get dining table leg and copy to get other three ones.



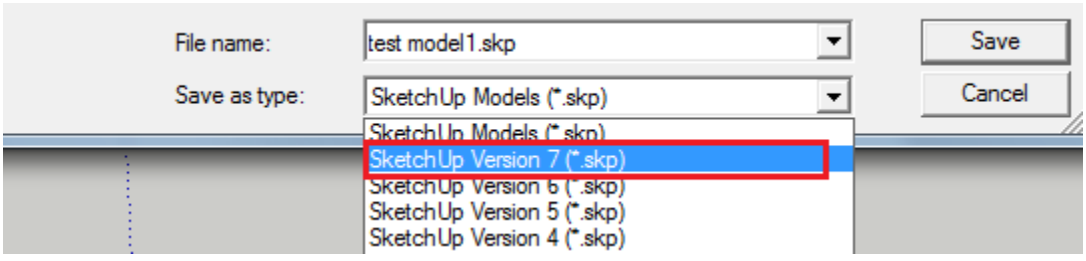
G. Select table surface, right click and select “Make component” to make table surface as a whole part.



H. Let's use the same way to make table legs as a whole part.



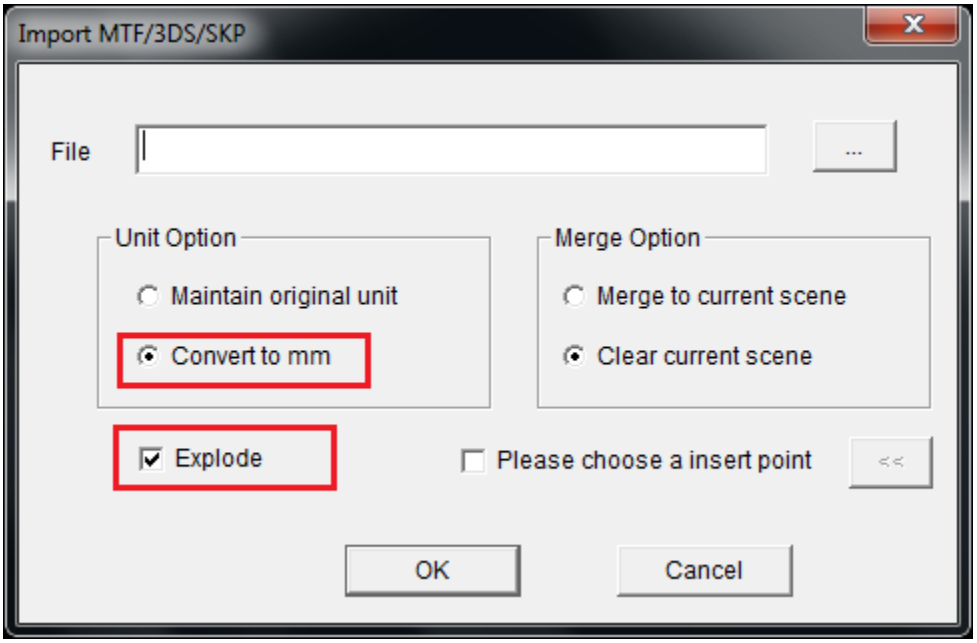
I. Finally, let's save this model. To ensure successfully model importing, we recommend users to save it in version7.0 or lower format.



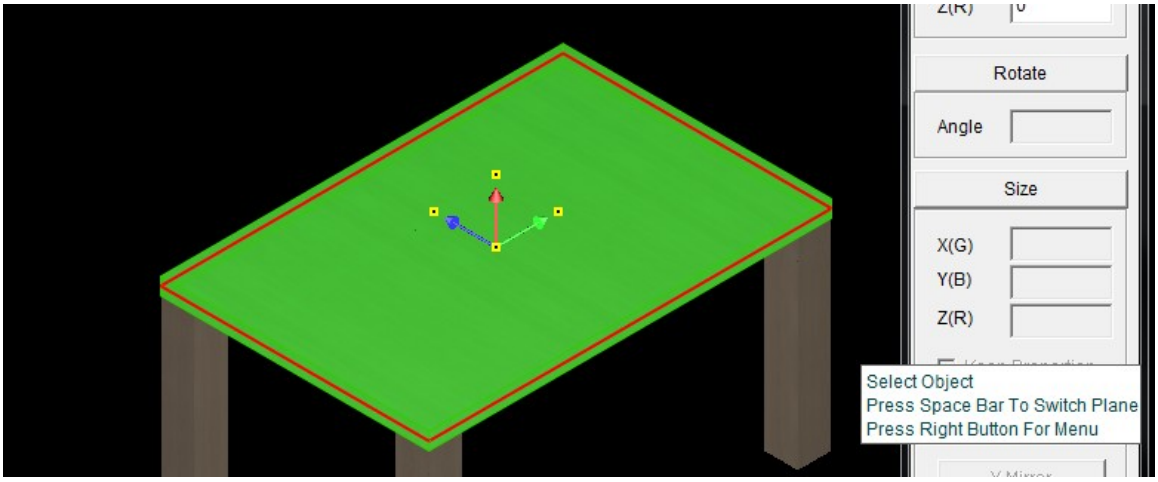
5. Import sketchup model into InteriCAD

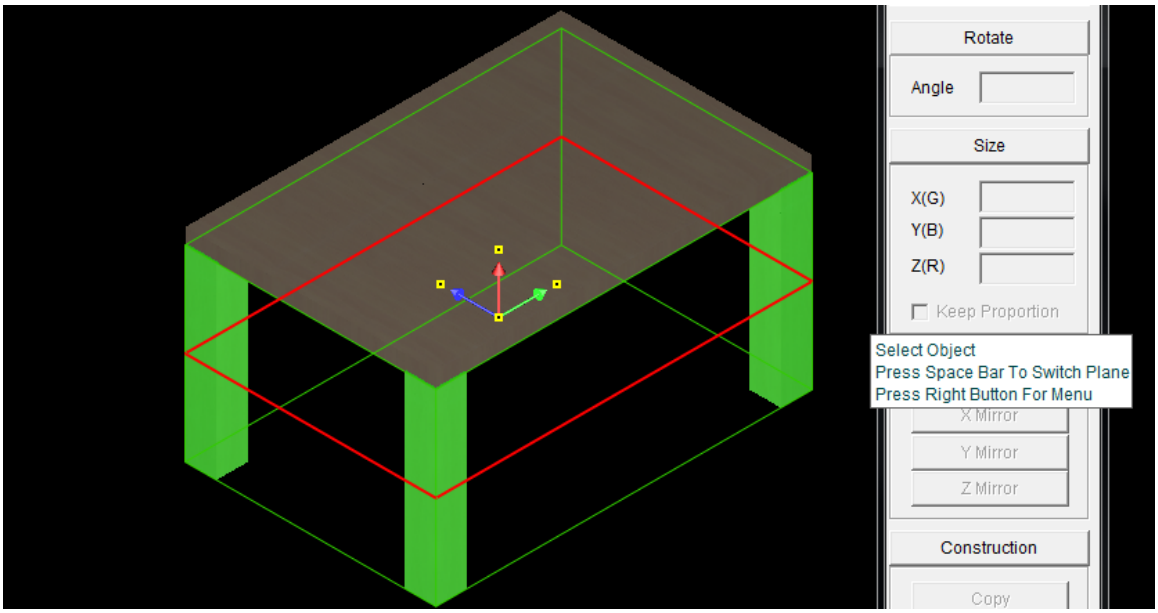
A. Select “File>>Import 3ds sketchup model…” from the menu and you’ll get a sketchup import dialogue box.

B. Select “Convert to mm” and “Explode” when you import the model.

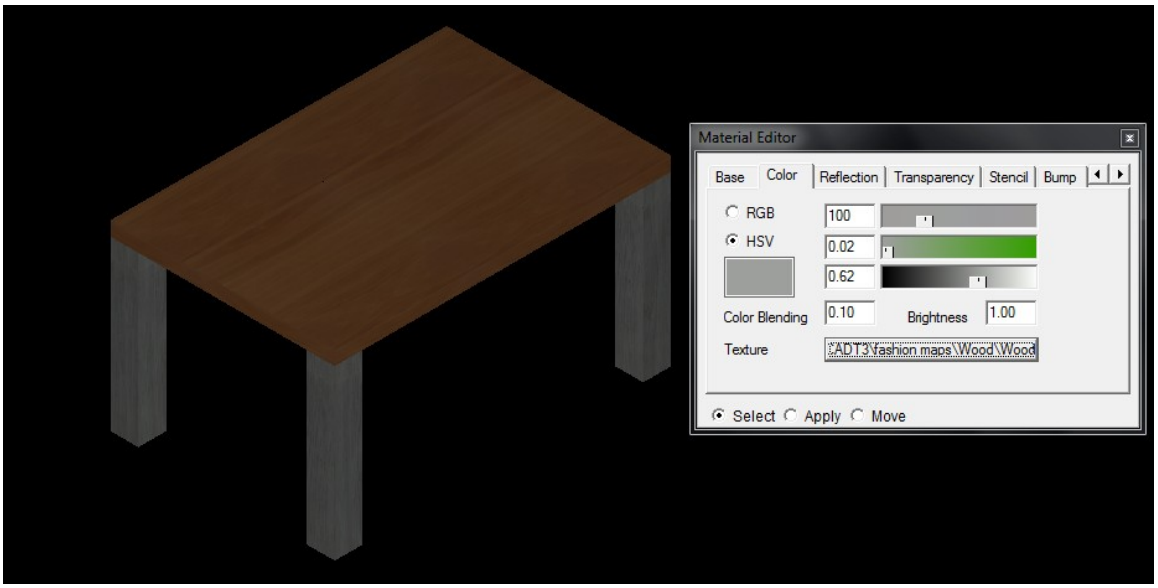


C. As we can see, we could use “object editor” function to edit the model. It has been separated into two parts, and what we select is a whole part, not surface anymore.

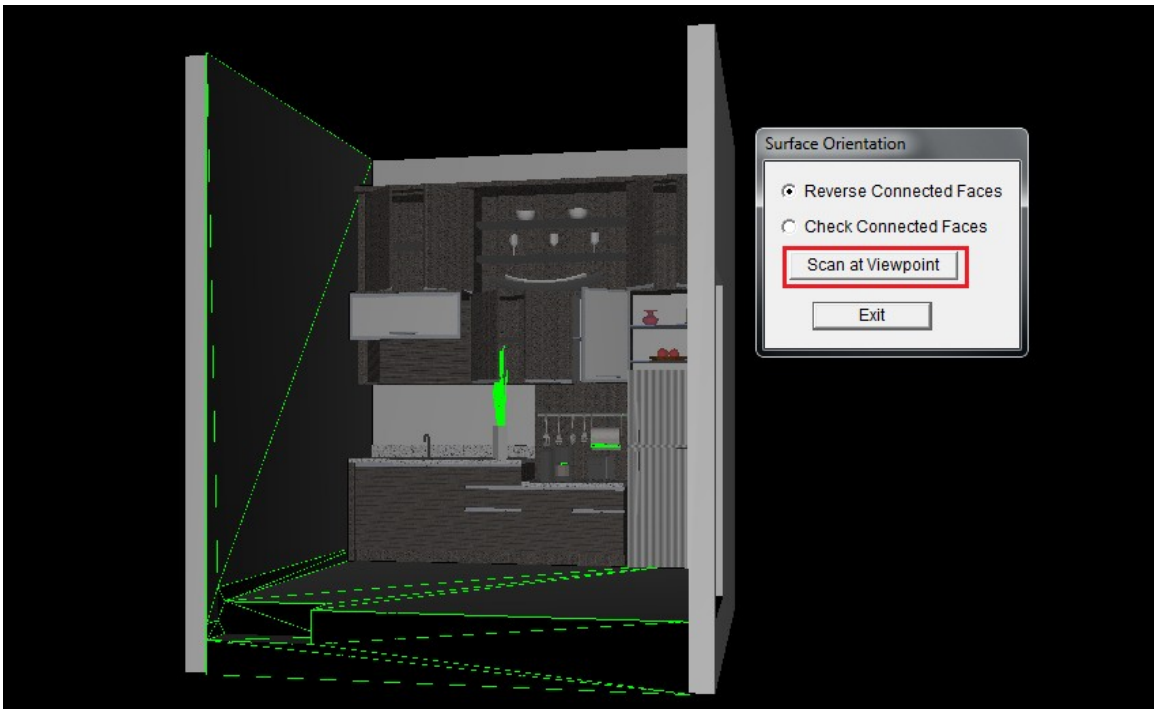




D. Textures are also separated. Now let's use "material editor" function to apply different material to table surface and legs.



E. Sometimes, if we get models with inversed surfaces, we could use "Surface Orientation" function to adjust them.


Surface Orientation
Reverse Connected Faces
Check Connected Faces
Scan at Viewpoint
Exit