

100% Curved Surfaces Pants Tutorial For Shade7

By ManoloZ
Shade7 and Poser © E-Frontier

Foreword

This tutorial, while being quite easy to follow, does assume a basic handling of Shade. That is, at least knowing how to zoom, pan, select, etc.

Acknowledgements

I would like to thank everybody in the Shade Forum at Renderosity, they have opened my eyes to the enormous versatility achievable with Shade. Especially to Angell, who is a great moderator. I would also like to recognize the work of Noel in Shaderscafe forum, or Spiritual in several other forums. He has tirelessly helped, in his own words, “light the Shade”.

And lastly, to all the E-Frontier people for providing such a wonderful program.

And now, let us get started!

In case you do not have the habit, do use the keyboard shortcuts. They are time-savers.
The ones you will be needing for this short tutorial are:

Ctrl+3 to open the Camera window

Ctrl+6 to open the Surface window

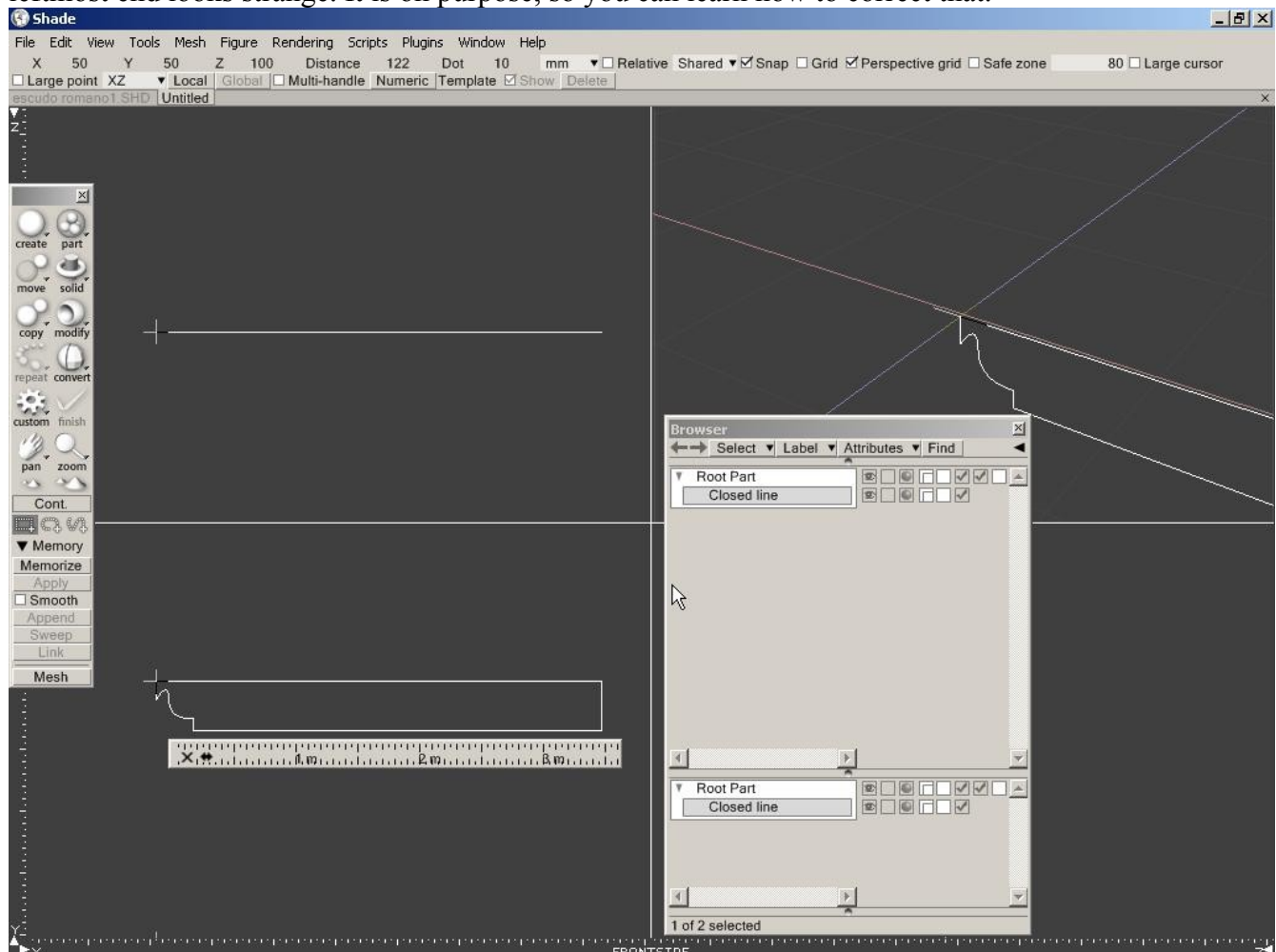
Ctrl+9 to open the Browser window

Ctrl+m to enter modify mode

zx to insert/delete control points

First of all, I disabled the grid so what I am drawing is more easily seen in the screengrabs.

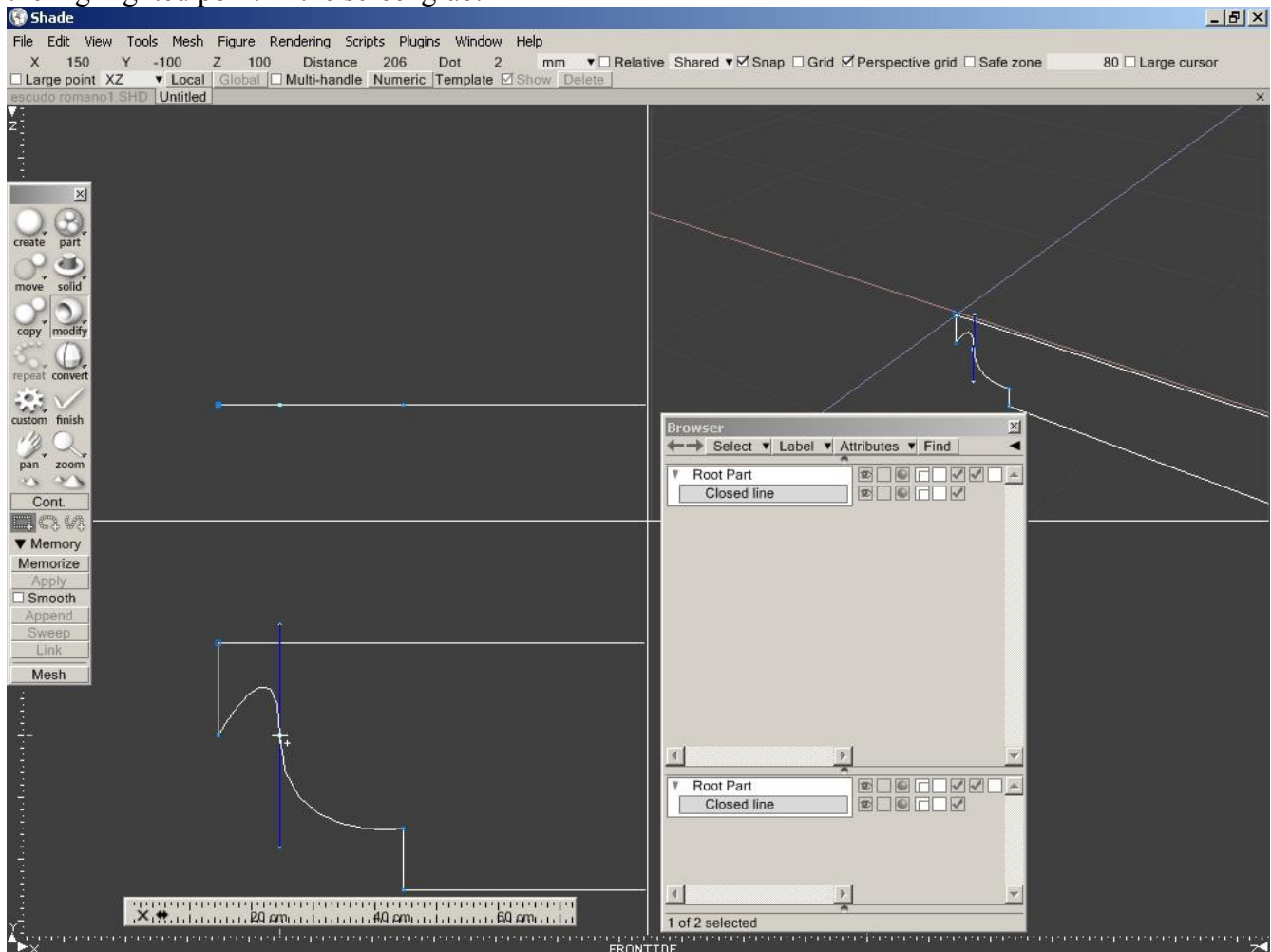
I am using mm as units, and the ruler as a reference so the things I do do not get too out of proportion. The ruler can be shown with **View->Ruler** on the top menu. To change the ruler, drag a corner. If you do a horizontalesque rectangle, the ruler will be horizontal. Same thing with the vertical. First we begin with the wooden beams. **Create->Closed Line**. Do a figure more or less like the screengrab. Note: To do a curved line instead of a straight line, click+drag. You can see that the leftmost end looks strange. It is on purpose, so you can learn how to correct that.



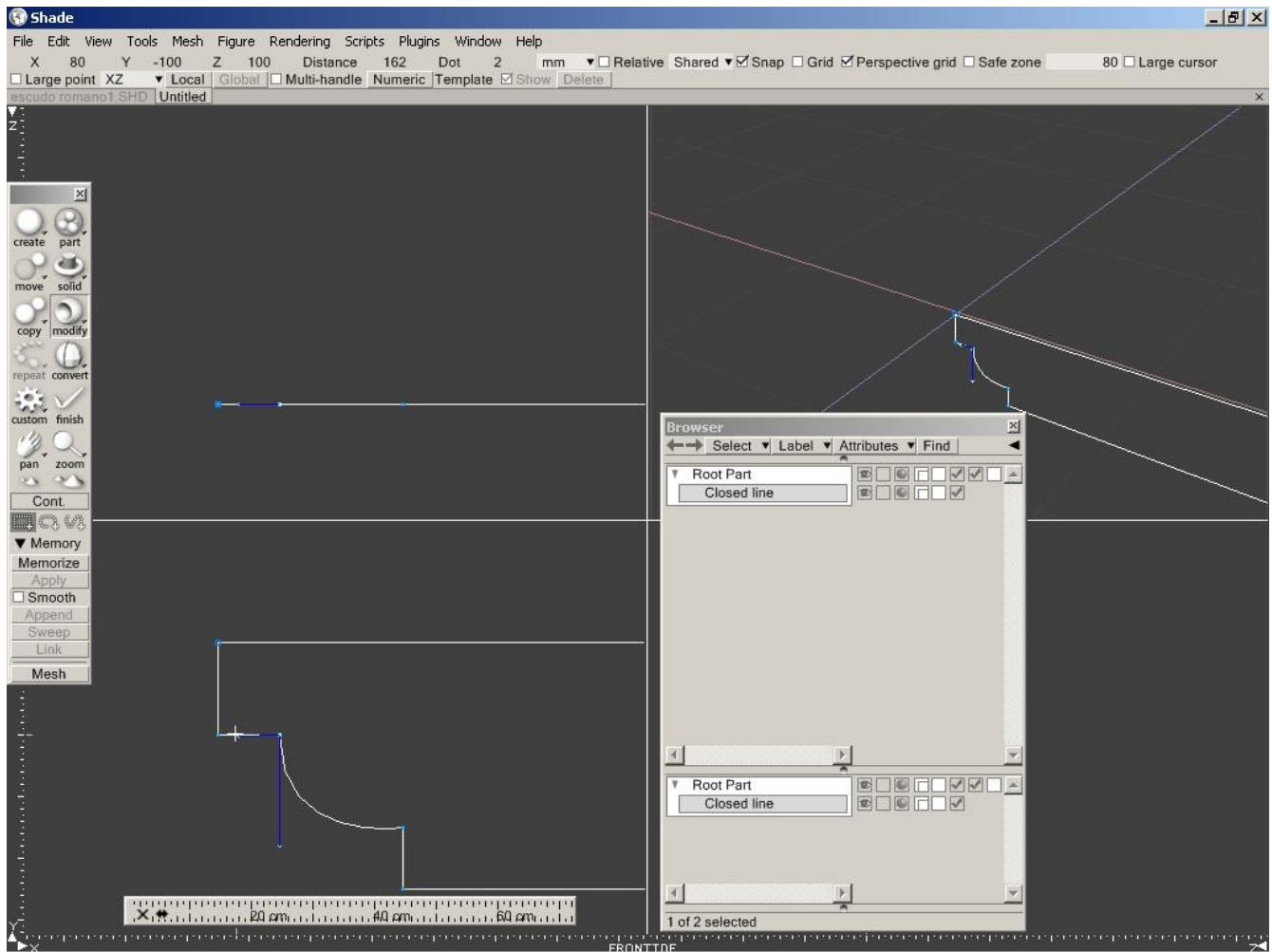
Now we are going to edit that strange leftmost end of the beam. First we zoom to it. In Shade8, with the **zoom->zoom in** in the toolbox palette. In Shade7, **Ctrl+mousewheel**.

When we have it zoomed enough so the editing can be confortable, with the line selected, we enter modify mode **Ctrl+m**. The brightest point represents the selected point. Sometimes it is not the one we want. If it is not, **Ctrl+leftclick** and drag somewhere where there is no point to unselect. Then click on

the highlighted point in the screengrab.

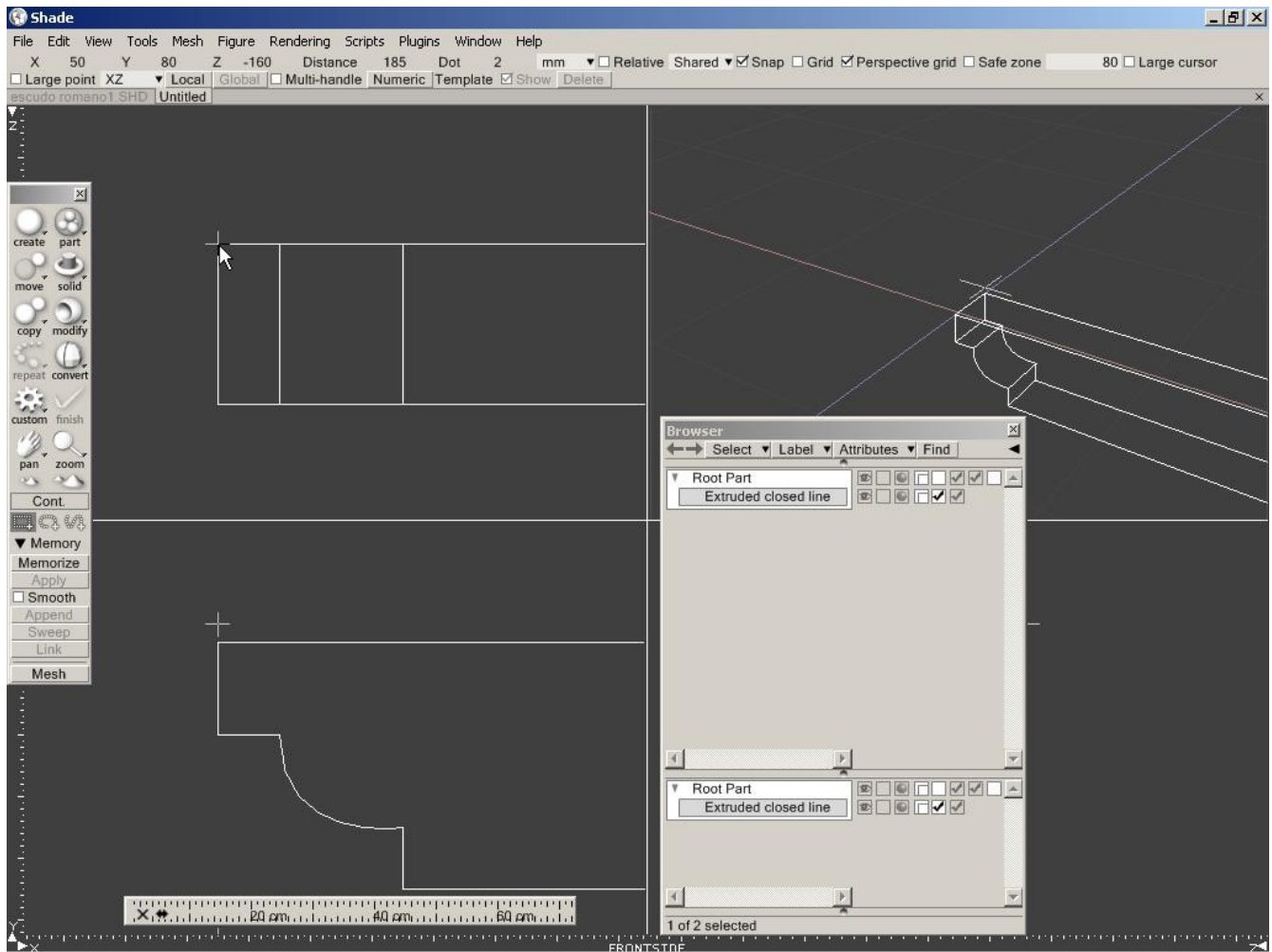


Now the curve to the right is ok, but the one to the left is undesired. To correct it, **Ctrl+click+drag** on the top dot connected to the blue line, or **top handle**, and take it near the left point, as in the screengrab.



The **Ctrl+click+drag** tick lets you edit the curves independent from one another. Now we press the **Enter** key to exit the modify mode.

Now that we have the profile as we like it, we extrude the beam with **Solid->Extrude** in the toolbox pallette. Now we **click+drag** vertically in the topleft viewport. And this is what we get.

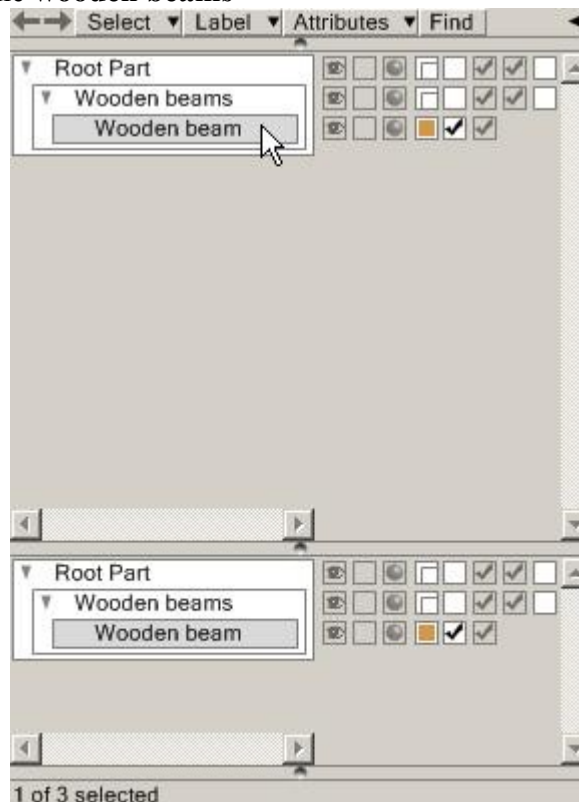


The beam is complete!

Now we start doing some browser things to get organized. If it is not open, **Ctrl+9**

First, double click on the **Extruded Closed Surface**. A window pops up, rename it to something like **wooden beam**.

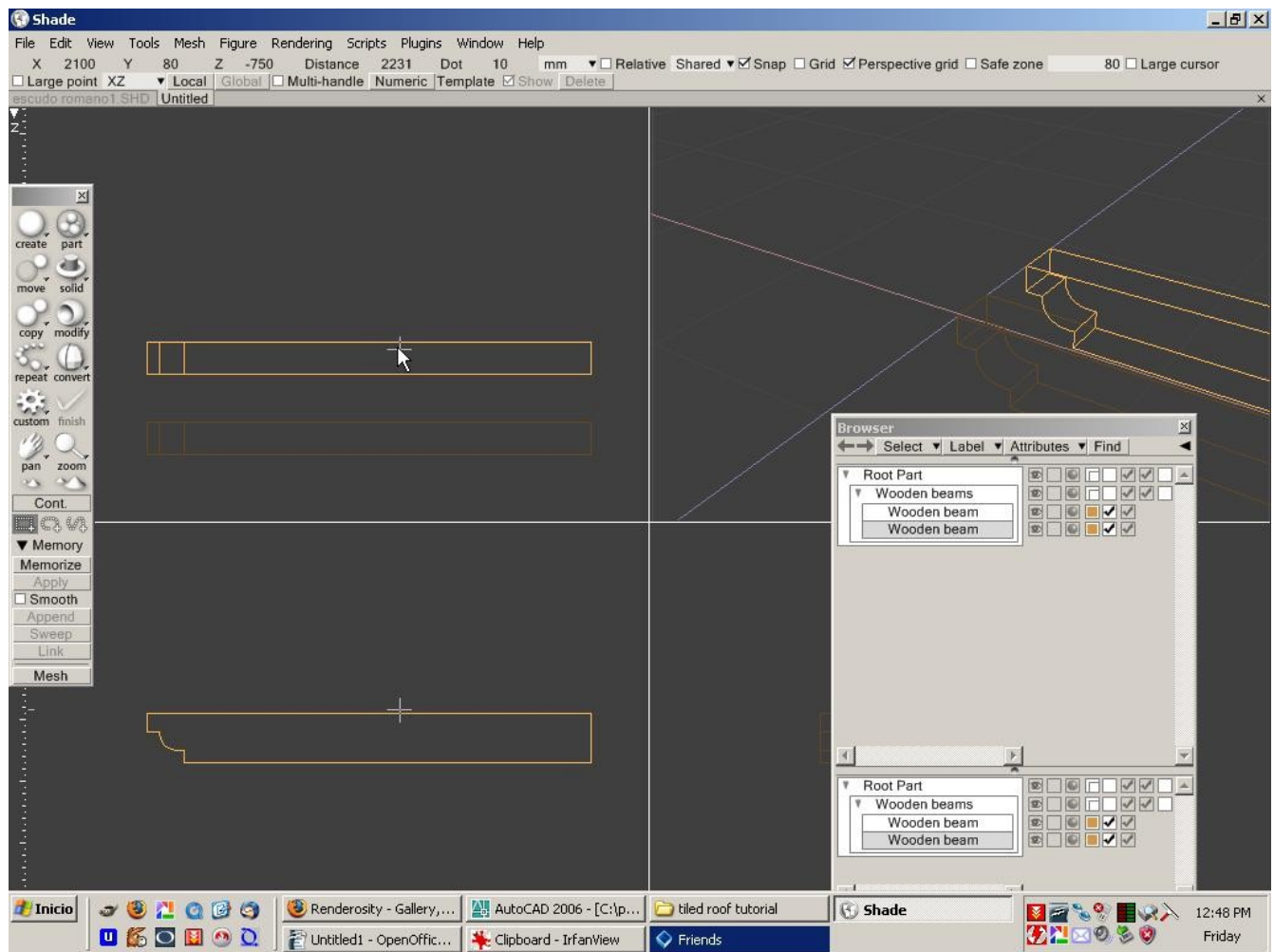
Now we create a part that will contain several beams. Why? So we organize things from the beginning. **Part->Part** in the toolbox palette. We double click on the **Part** in the browser window, and rename it to **Wooden beams**. Now, to insert our wooden beam into the wooden beams part, we select **wooden beam** and drag it on top of the **wooden beams**



Pseudo off topic: If the bottom part of the window looks strange to you, you surely have Shade7. In Shade8 you can have split views in the browser window.

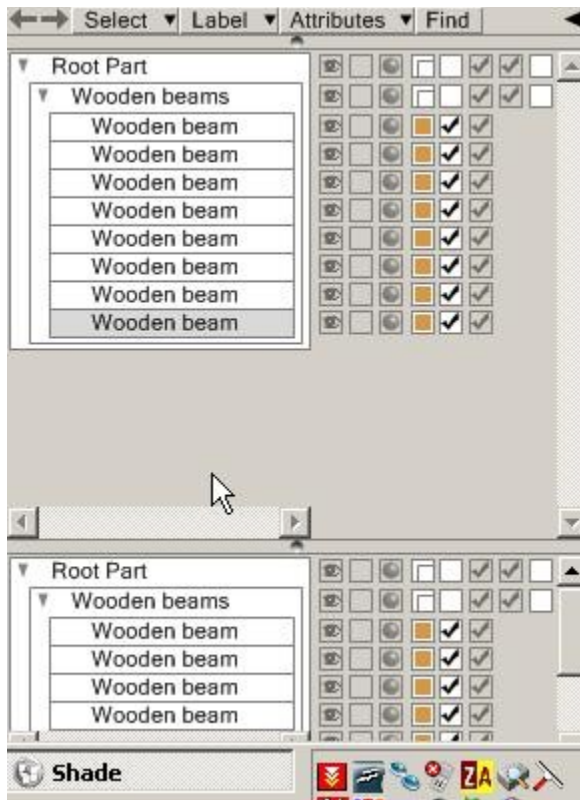
Now we make several copies of the beam. I will do it without links, so Shade7LE users can benefit. If you use Standard or Pro, use link instead.

We do that in the topleft viewport with **Copy->Translate** and drag vertically.

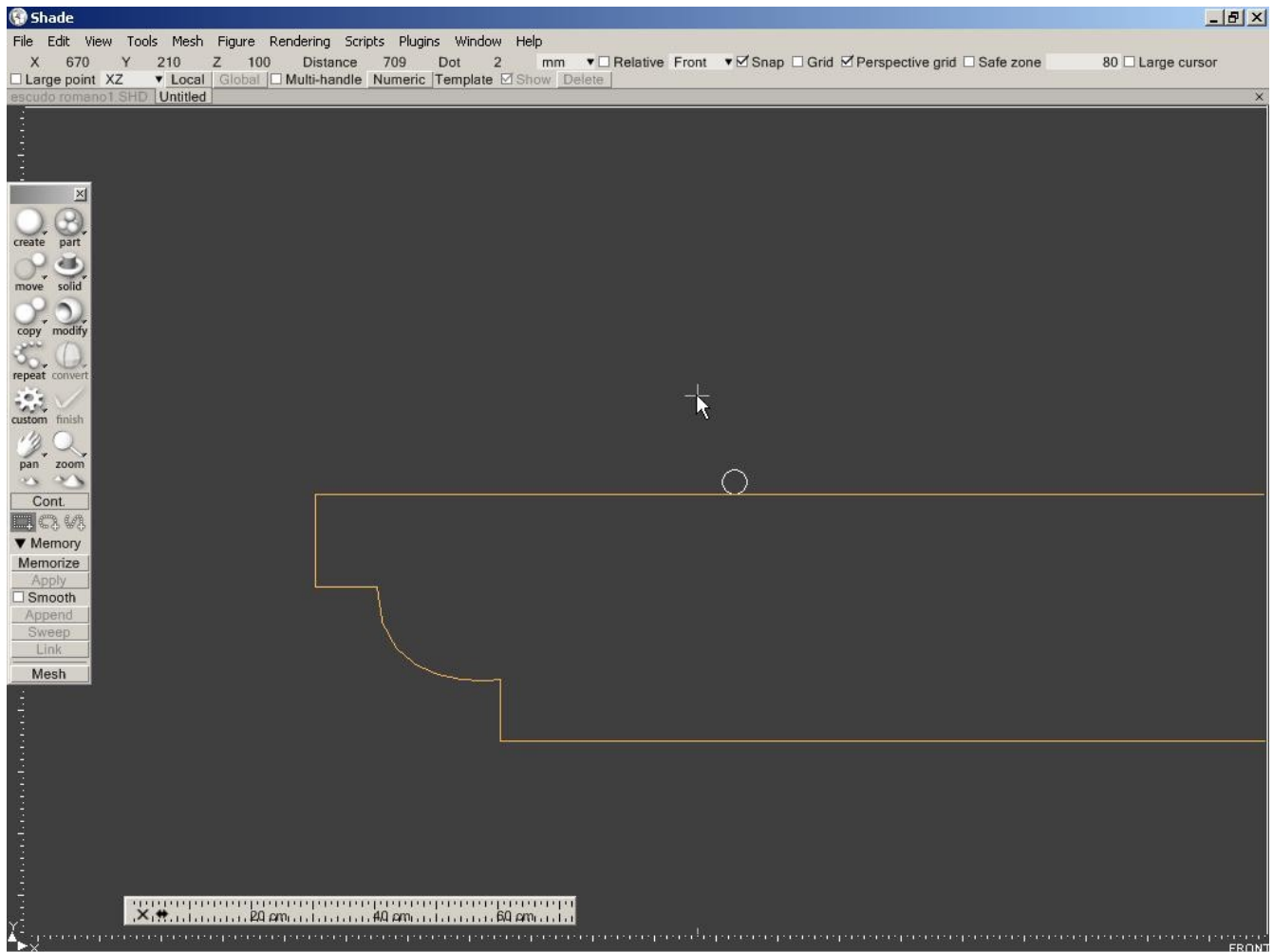


The important thing here is that the new wooden beam is automatically ordered under the wooden beams parts.

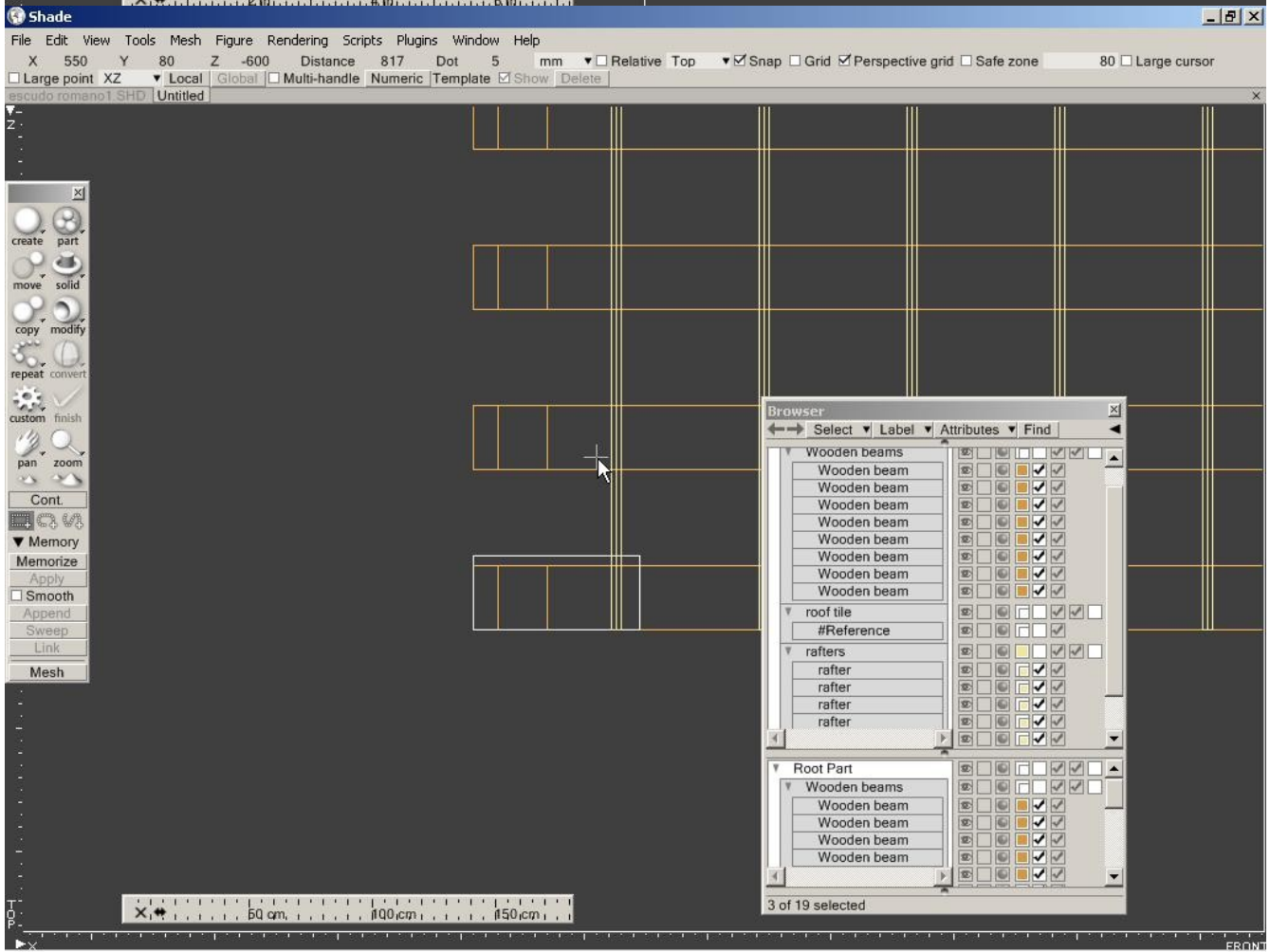
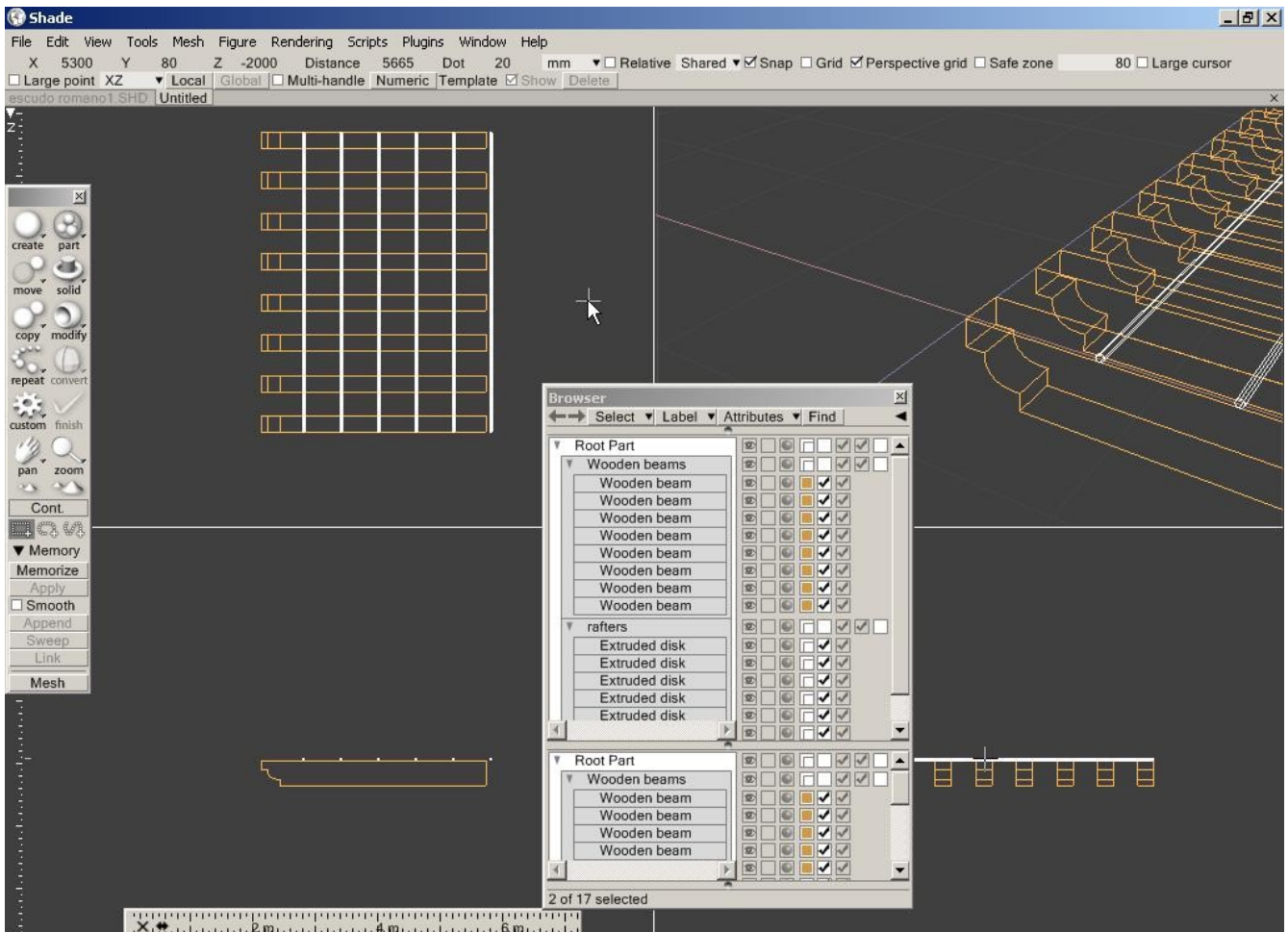
Now with that selected, do a **Repeat->6 times** Now we have 8 beams, equally spaced, all ordered under wooden beams!

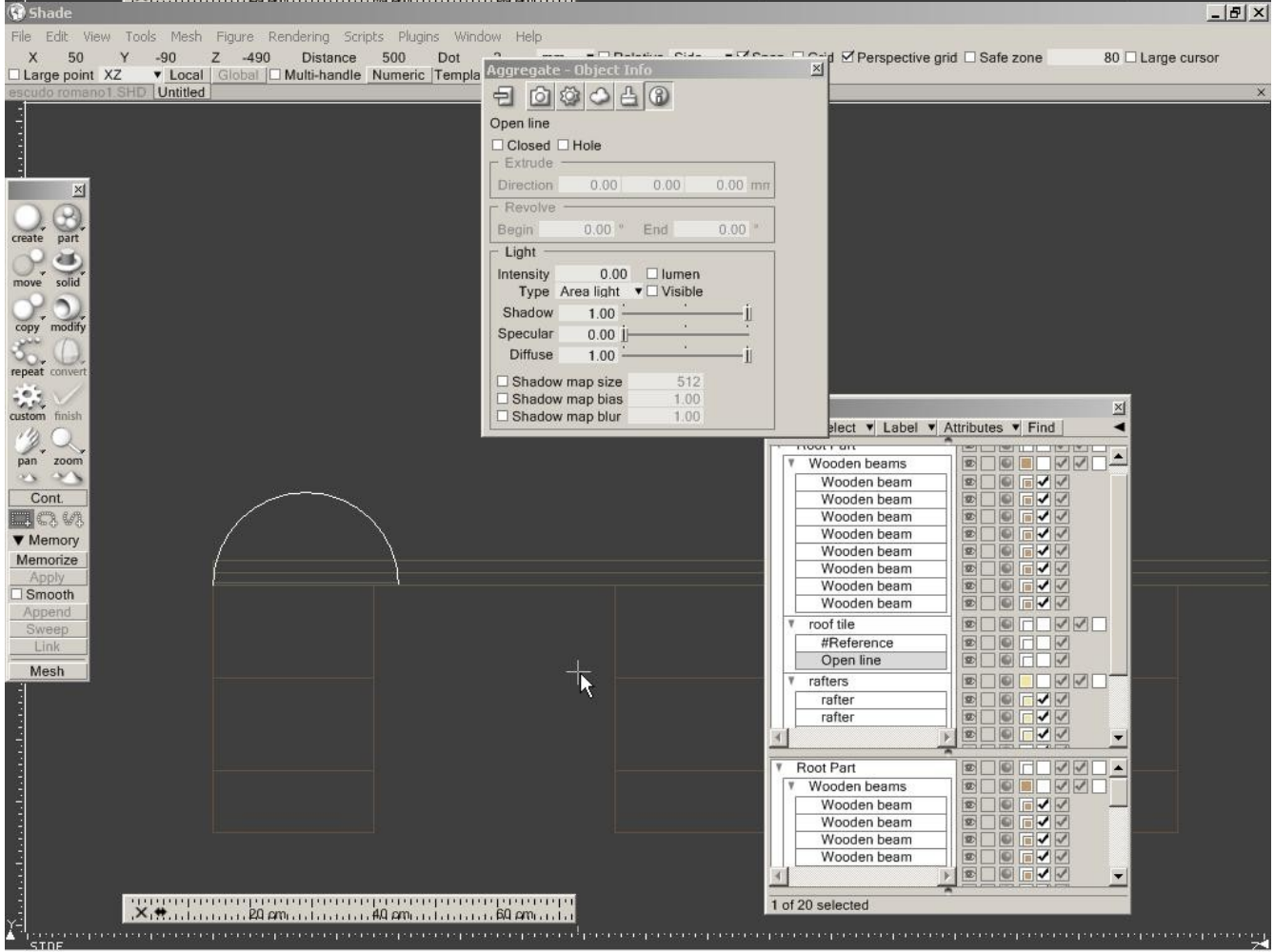
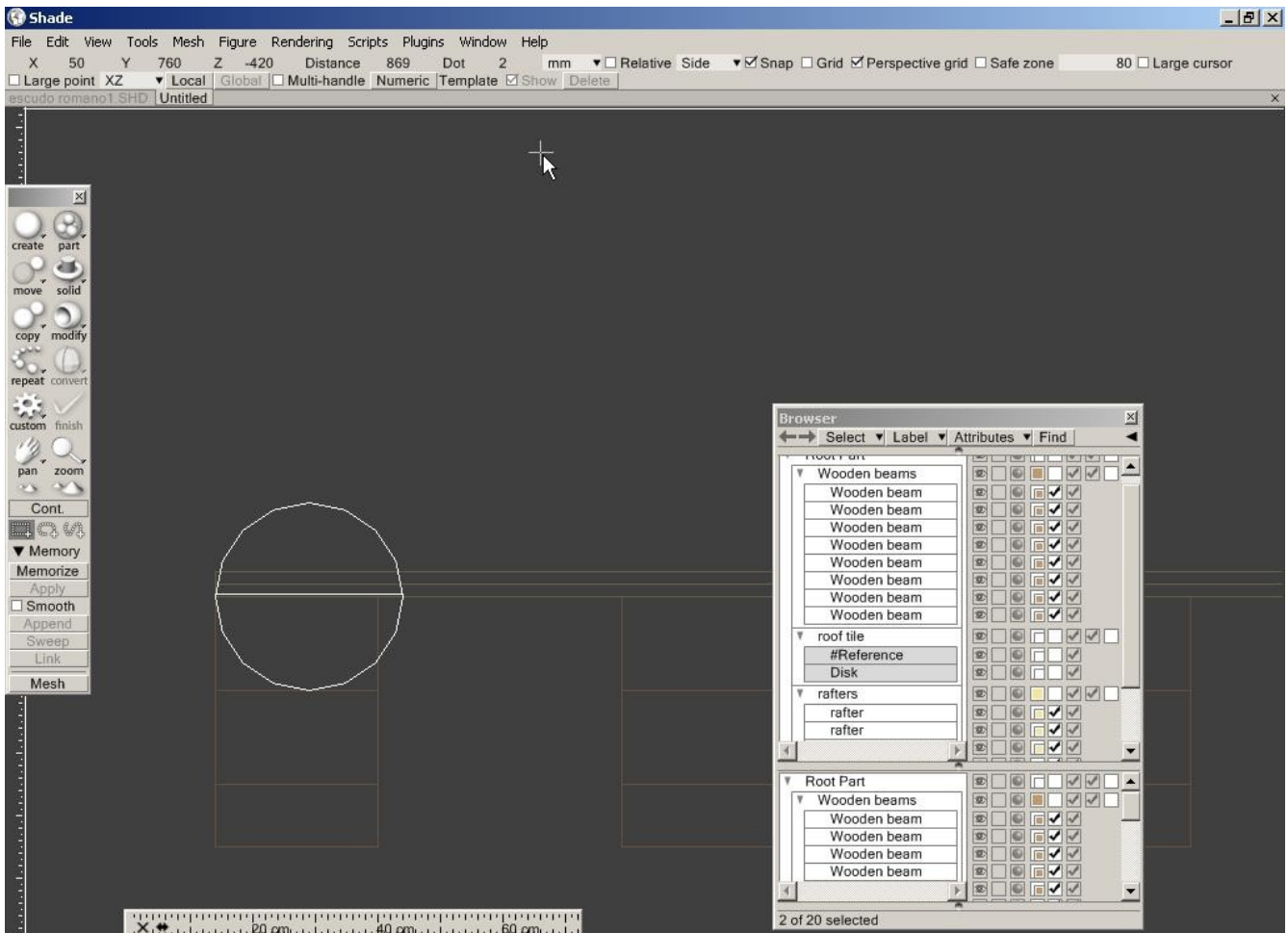


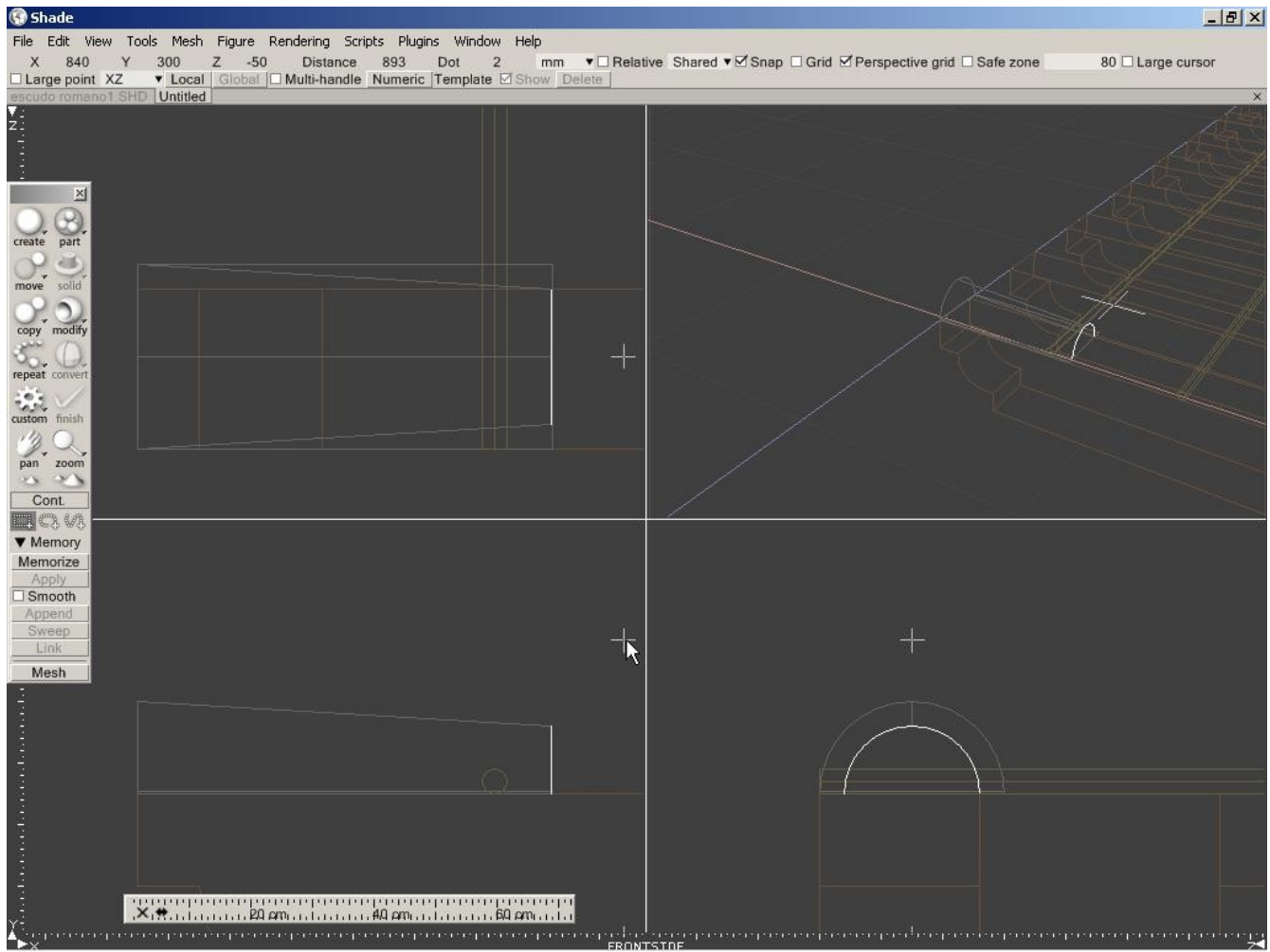
Now, we are going to do some rafters (English is not my native language, but I think that is the term). First we create a part for the rafters as done above, and name it rafters. Then we **Ctrl+Click** anywhere on the bottom horizontal border of the beam at the bottom. Then we zoom in on the bottom left view. We do a part and rename it to **Rafters**. Then we create a **Create->disk**, and draw a disk as in the screengrab. Tip: To zoom in just on that viewport, use **Ctrl+shift+g**, and to return to the quad view, use **Ctrl+shift+f**. I told you, keyboard shortcuts rule!



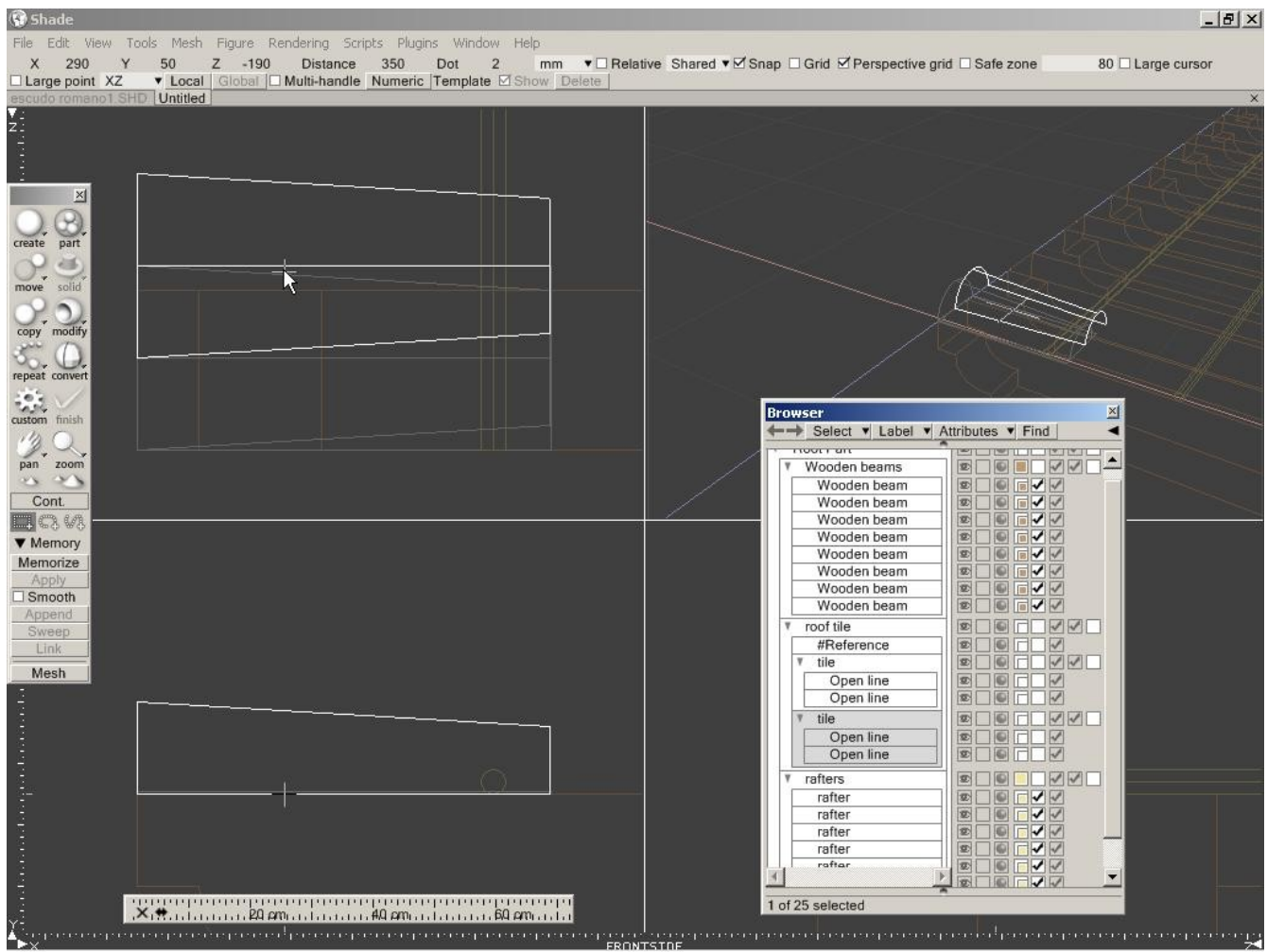
Now we return to the quad view, and extrude the disk as we did the beam, to the uppermost edge of the top beam. Then we **Copy->Translate**, and **Repeat->4 times** to get our other rafters. This is what we get:



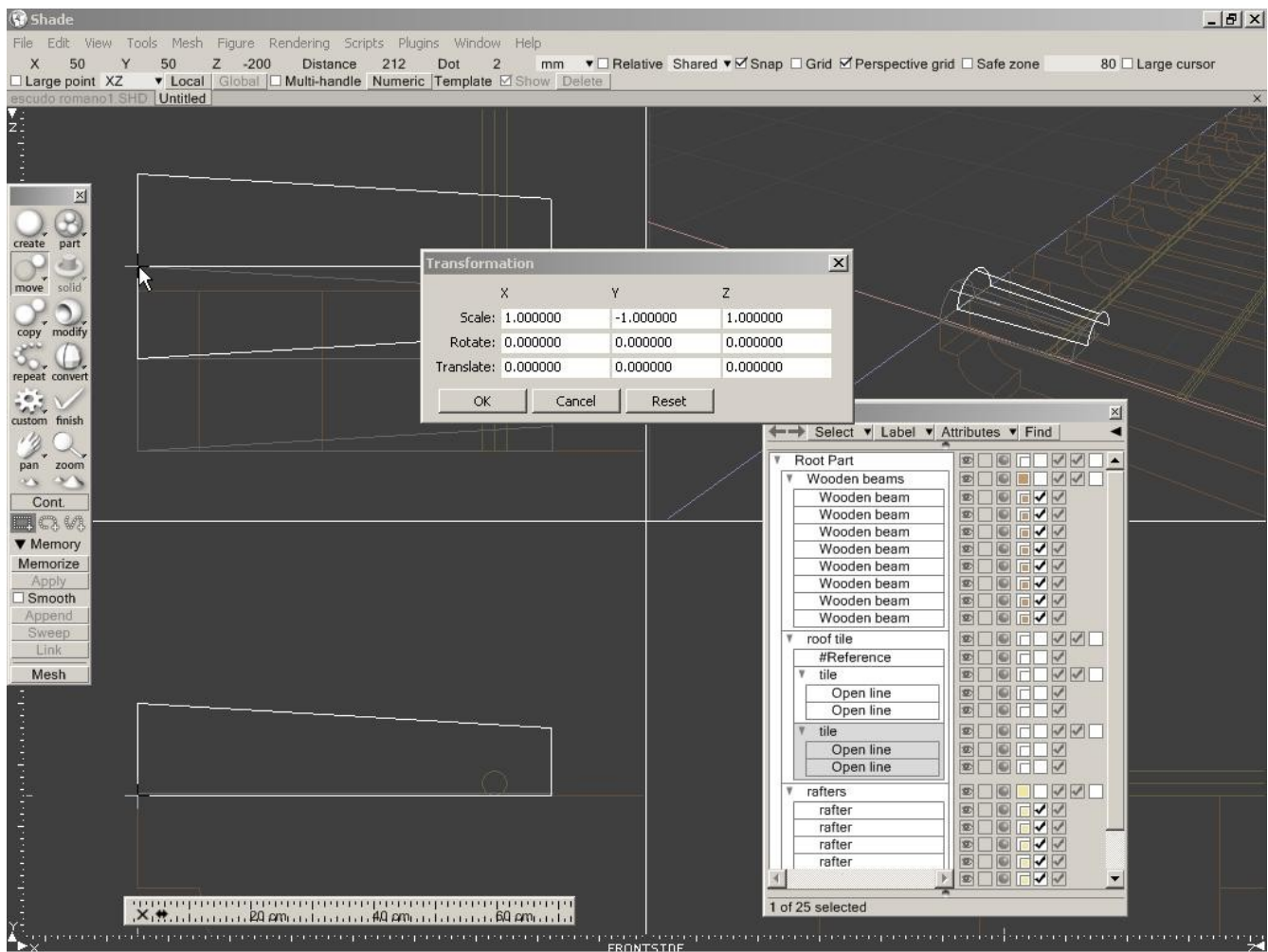




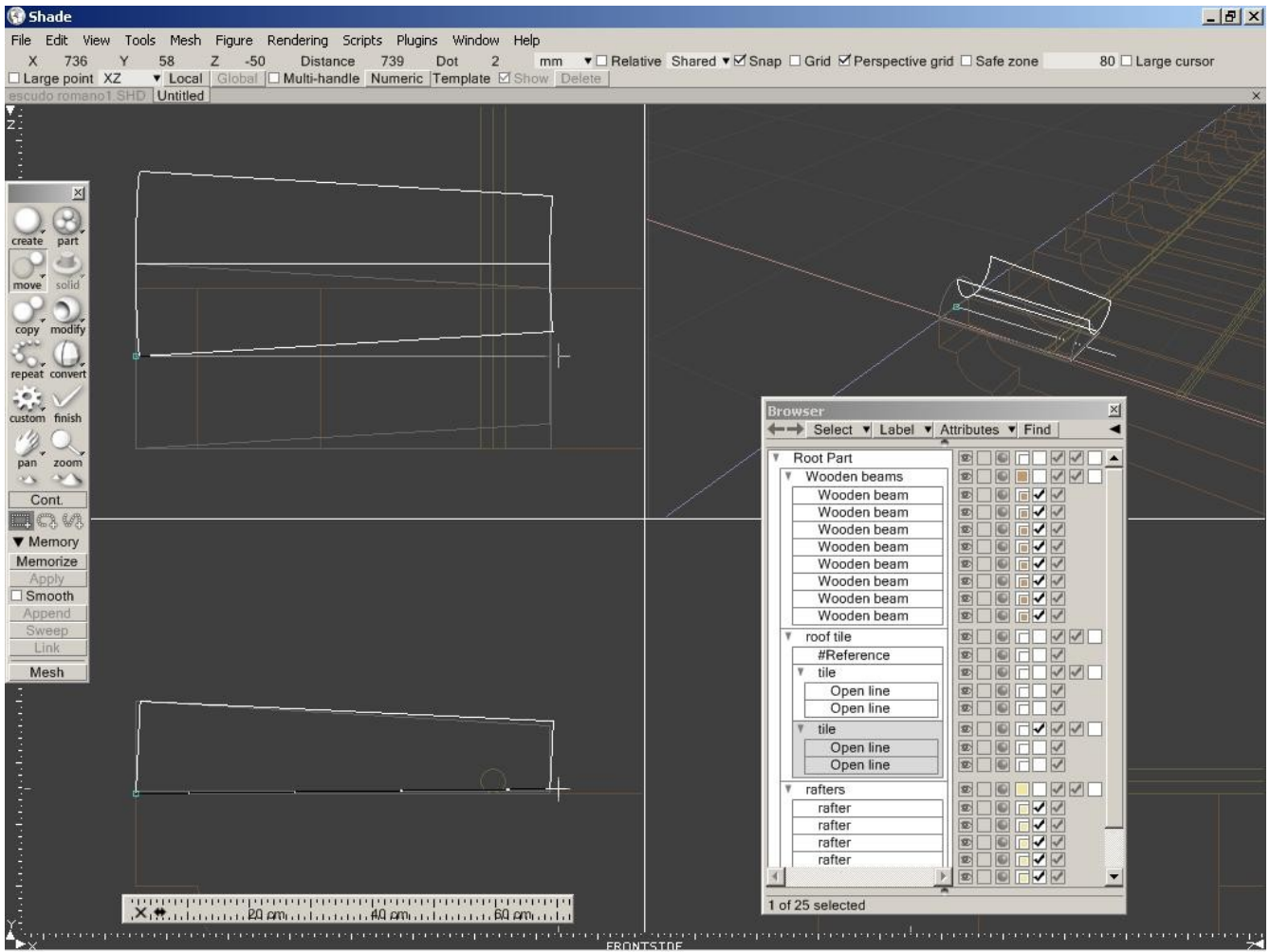
Voila! We have a tile. We do not need our reference any more, so we can erase it, selecting it in the browser and pressing the **Delete** key. We need to do a copy of the tile and turn it over and make sure they do not overlap. So first, we select the whole tile in the browser, and then we copy it so it overlaps in the middle. I think it is easier to see it in the screengrab.



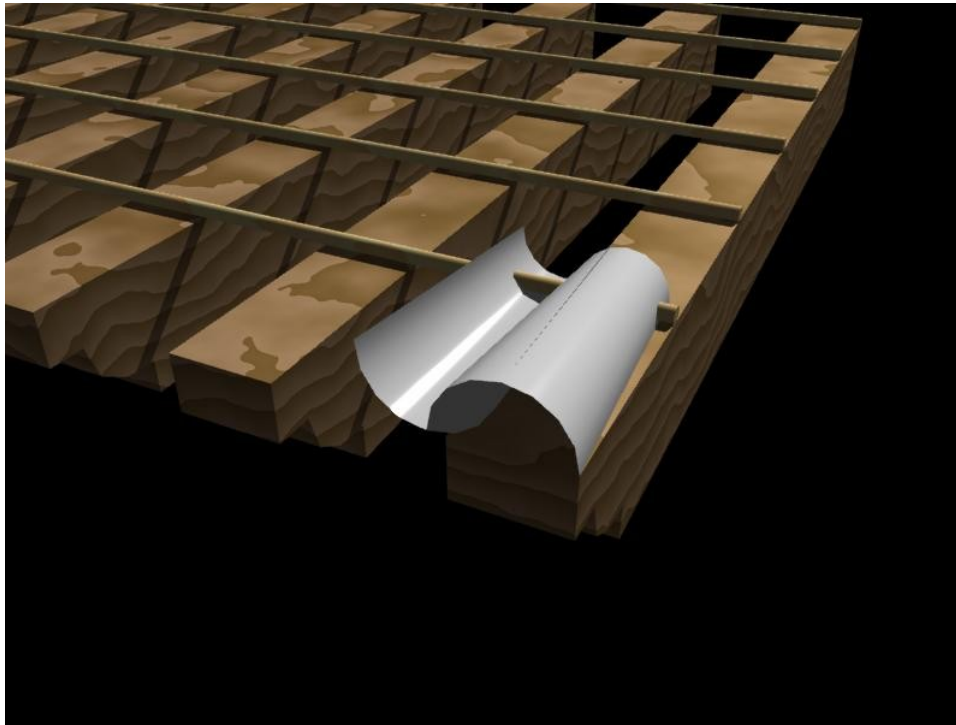
Then we need to mirror it. The easiest way is doing a **Transform->Numerical** (or **Transform->Special** in Shade7), and clicking on the middle of the left line of the tile in the topleft viewport, with a -1 on the Scale Y value. You can see it in the screengrab:



Click OK and voila! A turned tile! We could also rotate it by 180 degrees... However, there is still work to do. First, we need it to be on top of the beam with a **move->translate**. Then we need the bottom part to be aligned with the beam. We do that with a **move->rotate**, click the bottomleft part of the tile as a centre point, and click+drag on the bottomright part of the tile, dragging with the mouse until it aligns with the beam. Voila!



However, if we do a test render, chances are that this tile slightly overlaps. You can see this on this test render more clearly.



See the dark line running across the tile on the right? So, in order for the tiles not to overlap, we can do two things:

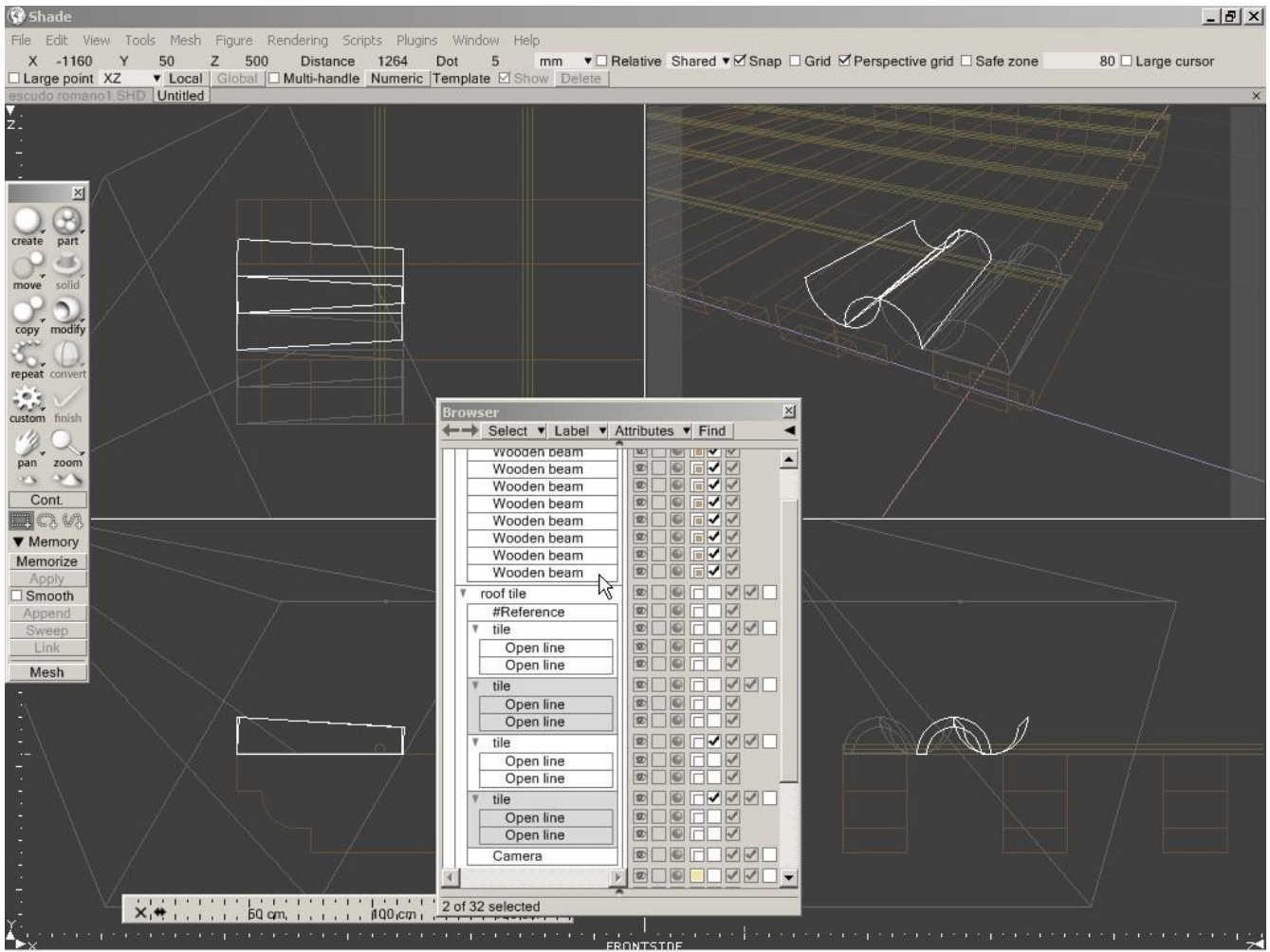
- 1) Move the left tile (as in the render) a little bit down
- 2) Move the defining lines of the left tile (as in the render) so they do not overlap

I will choose option 1, as option 2 would be cheating! Anyway, option 2 would take longer to do and is more complicated.

You are also seeing the rafters overlap with the tiles in the render, do not worry we will fix that later.

So we move the left tile (in the render, or top tile in the topleft viewport) a little bit down. Do not worry if it overlaps with the beam a little bit. When you are satisfied with the result, proceed with the next step.

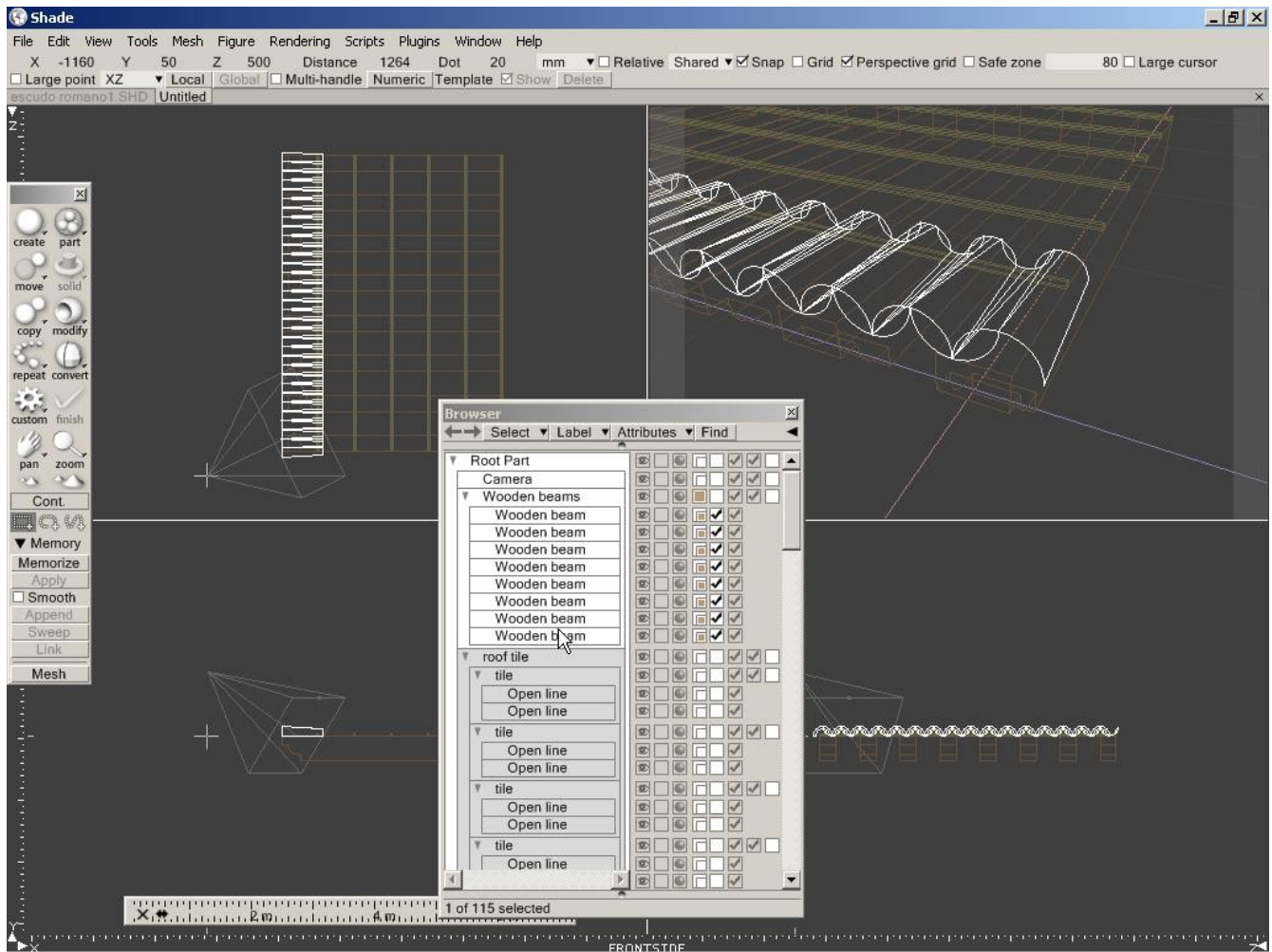
First, make sure that both tiles are under a part, with a name like **tiles**. Then, select both tiles **but not the tiles part** in the browser, and do a **copy->translate** in the topleft viewport as in the screengrab



Then, we do a **repeat->n times**. I put n times instead of a number, because according on how you spaced the beams etc, is the amount you need to repeat the tiles. If you wanted to repeat it more times than the options show (for example, 3545433289 times) select the ... dots, Shade will ask you for how many times to repeat.

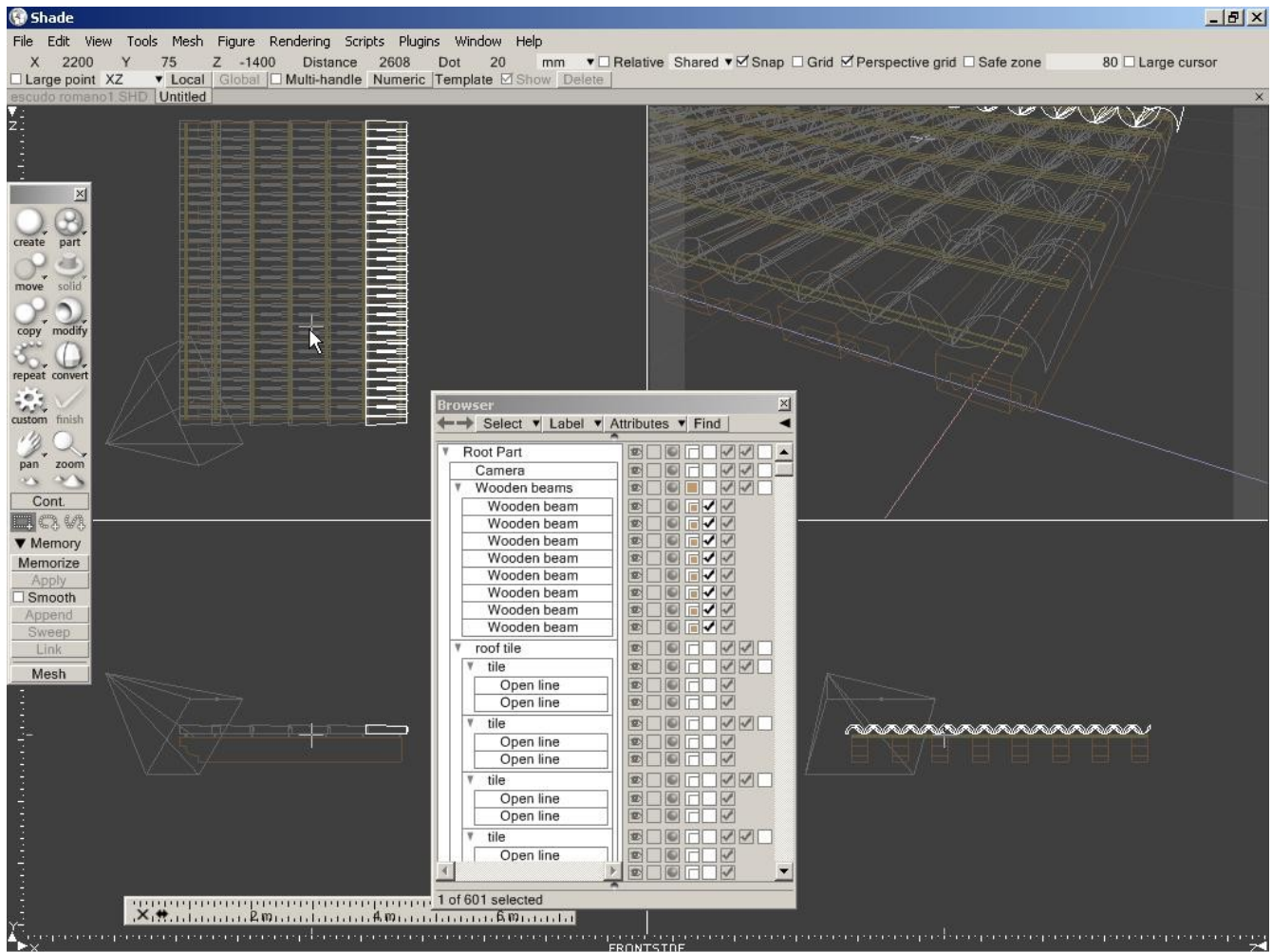
If the last tile is hanging out too much, either delete it or select the **tiles** part, and then do a **move->translate**. See why having parts is so useful?

The result should look like this:



Now in my case I forgot the first rafter. Oops! Ok so I copy it so everything is OK.

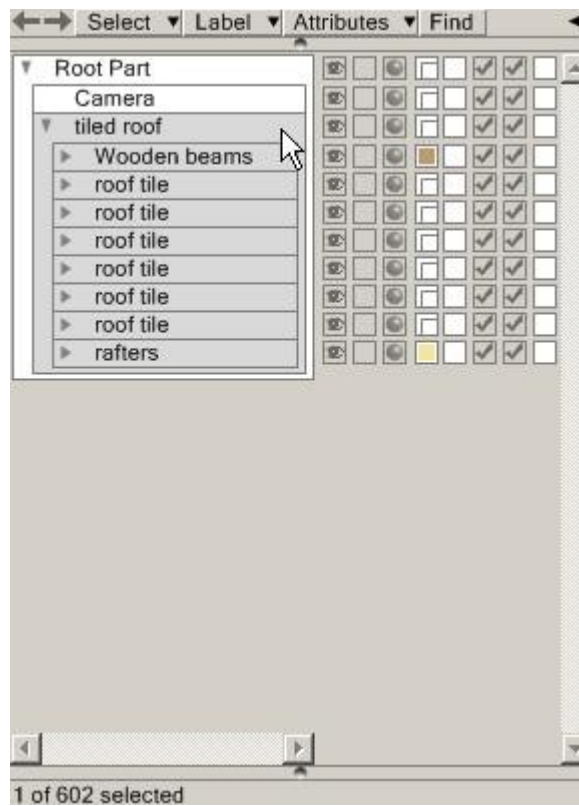
Now for the other rows of tiles, with the **roof tiles** part selected, we do a **copy->move** and a **repeat->n times** until the whole beams are covered. The result should look like this:



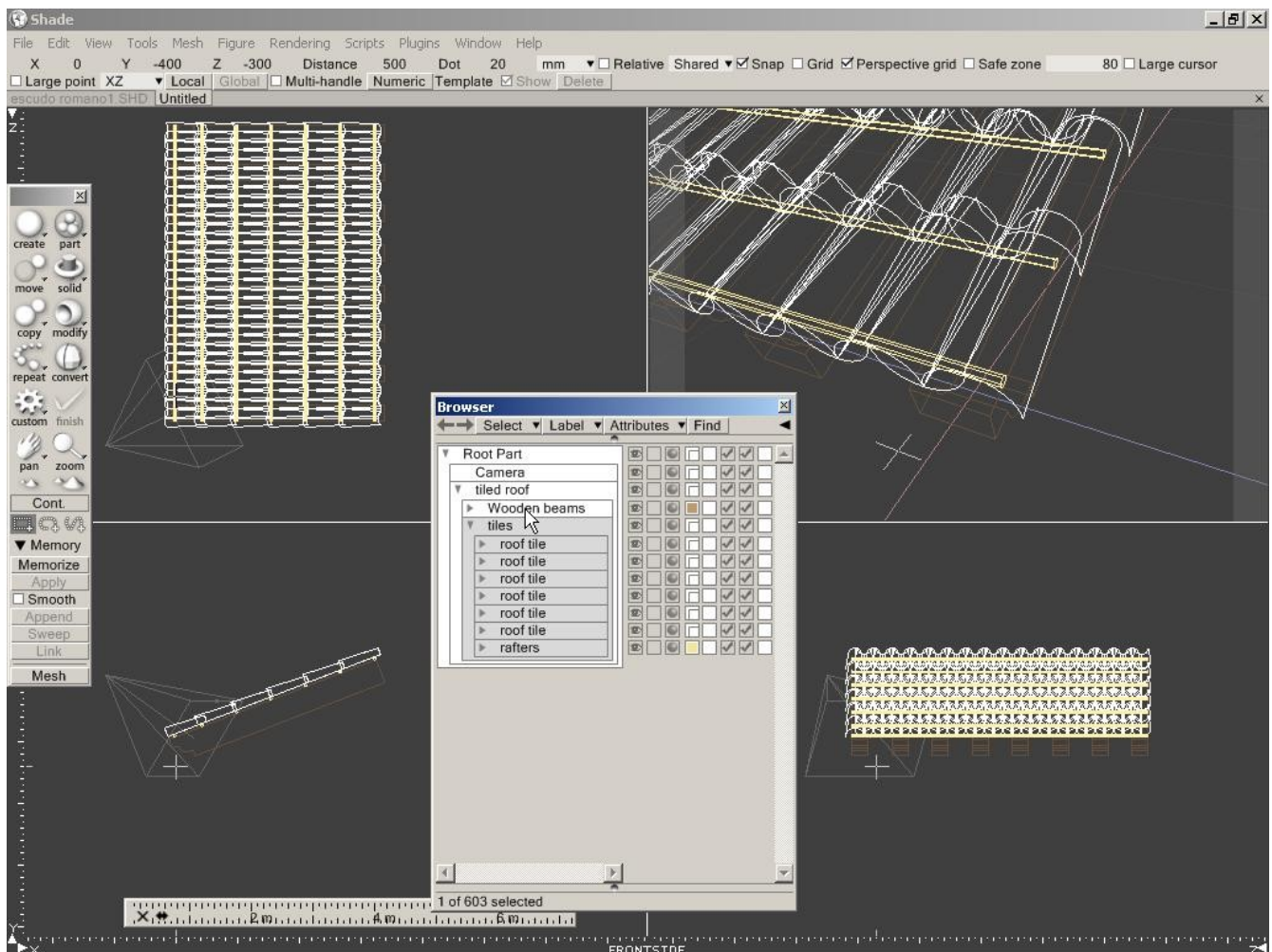
Voila! We have a roof! A roof without a slope... So to have the whole roof with the same inclination, I will show you the easy way. Select the anything just under the **Root Part** in the browser. Then do a **part->part**. Rename the part **tilted roof**. Now you may wonder, why first select the anything just under the root part? So the new part appears almost at the top!

Now drag it on top of the **root part** to be sure it is not under any other part. Then drag the **roof tiles**, **rafters** and **wooden beams** parts onto the **tilted roof** part. If you want to skip a lot of scrolling, clicking on the down arrow to the left of the names collapses the list so you just see the topmost of that hierarchy. I recommend you do it!

The collapsed hierarchy should look like this:



Now, with **tiled roof** selected on the browser, just do a **move->rotate** just like we did with the tile. Voila! Sloped roof almost ready!



I would recommend to order things further to do a new part, name it tiles, and insert all the roof tiles into it. This is so controlling the colour of the tiles is easier. Then apply a light orange-terracotta colour on it in the material window.

What is missing? A supporting beam, and some columns, and of course, a wall on the back. The supporting beam can be done with an extruded rectangle, and the columns can be extruded cylinders. The back wall can, of course, be an extruded rectangle. As by now you should be able to do just that, I leave it to you to do it. I hope that is ok with you.

