

Building Sculpture Assembly

In all of the pictures, the BLUE parts are the parts currently being assembled while the BROWN parts are those that have been assembled in previous steps. The bold typed header above each image is the STL file containing the current part or parts.

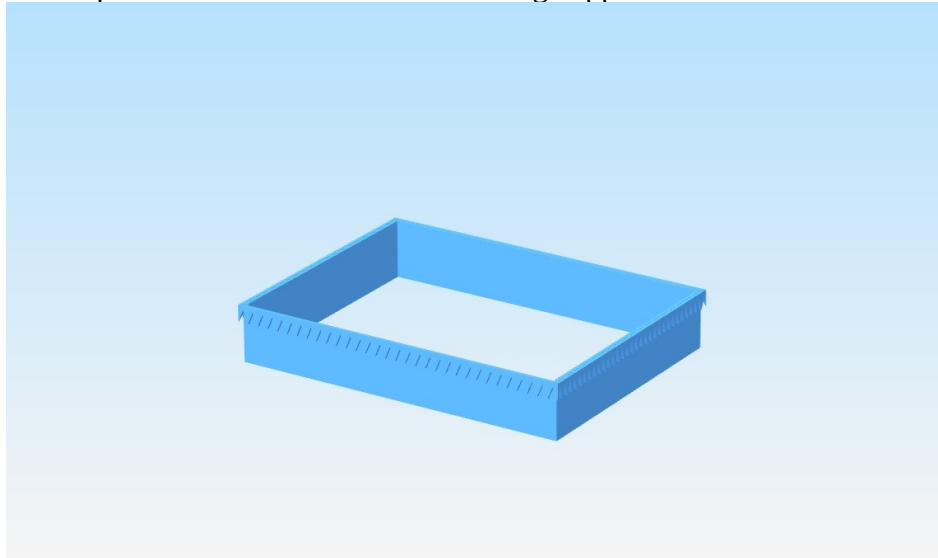
Every part and each assembly should be tested for fit before gluing! All of the tabs and slots may require a modest amount of filing (the slots will have to be opened a bit and the tabs narrowed).

There is one piece I could not print – it was just too small and delicate. I've included the STL for it and show their locations (there are 20 of the same piece) at the end of this document if you care to try.

The longest pieces are in the file Building_01(443)_x2.stl – 180.22mm. The piece with the largest X-Y area is Building_Base_2.stl – 152mm x 114.5. The tallest part is Building_Base_1.stl – 27mm. When complete, the model is 460mm tall (a bit over 18 inches).

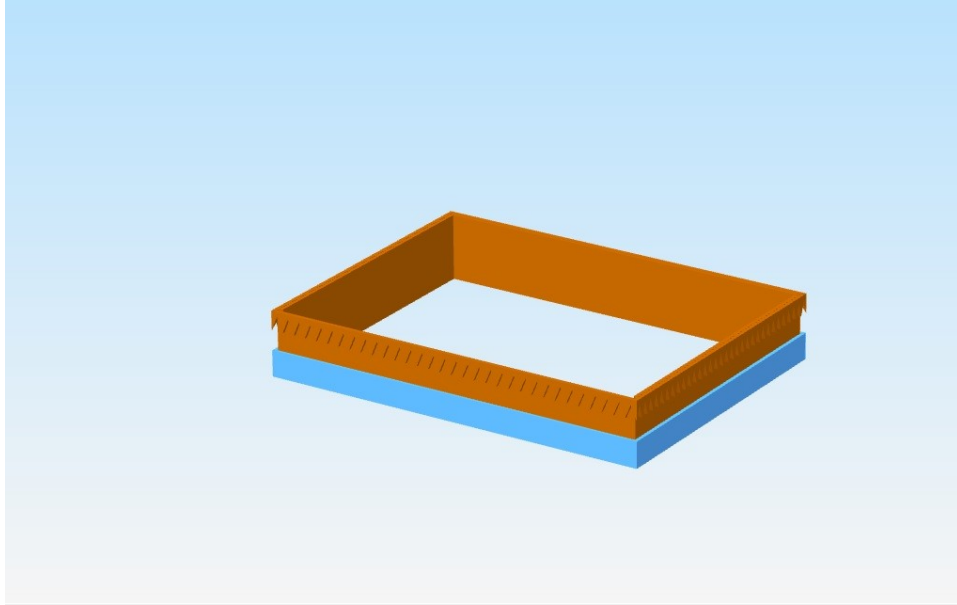
Building_Base_1.stl

Note that this piece is printed face down to avoid needing supports.

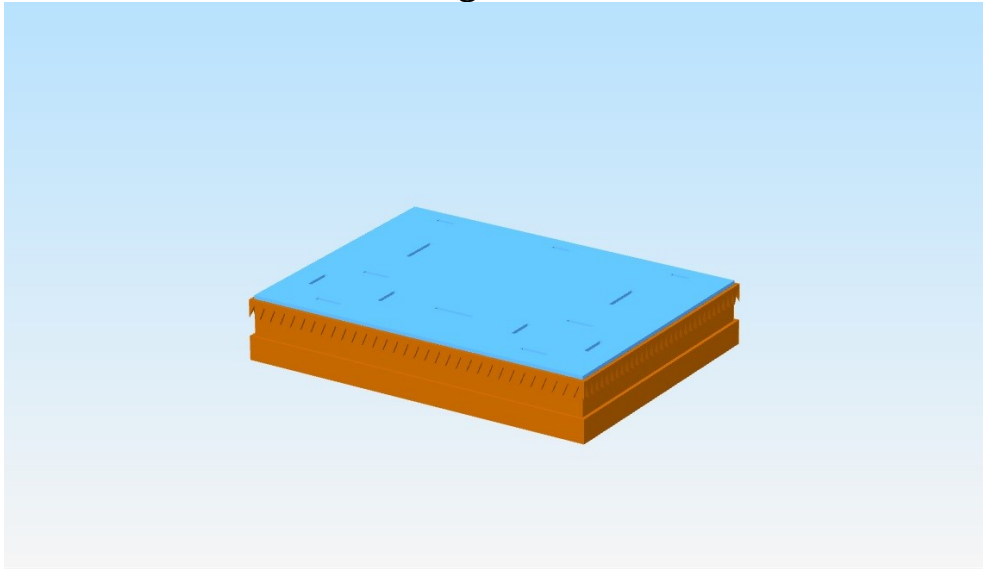


Building_Base_2.stl

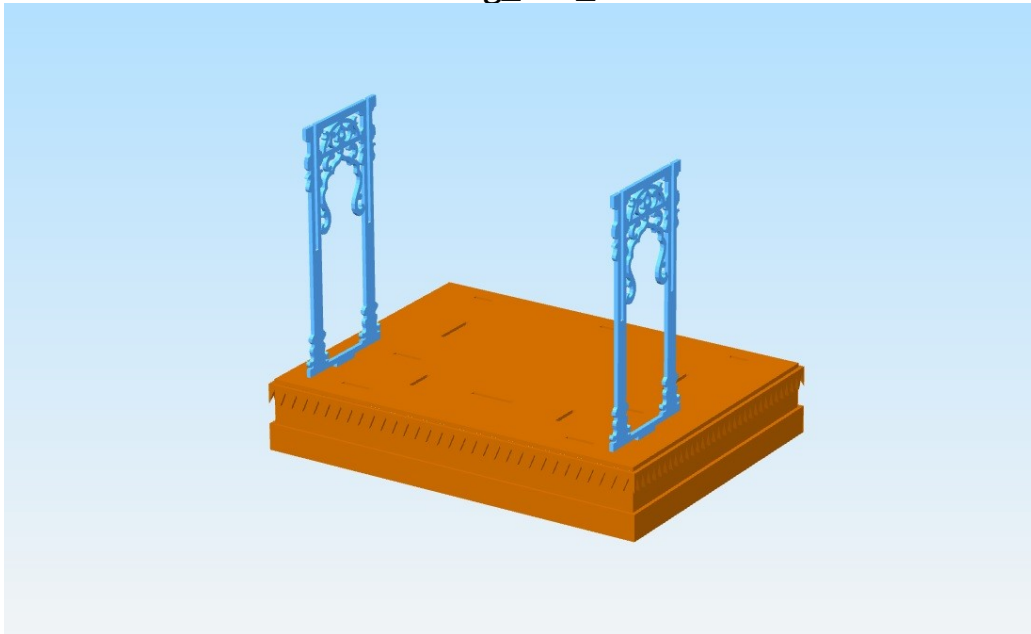
Building Base 1 fits inside Building Base 2. The bottoms should be flush with each other.



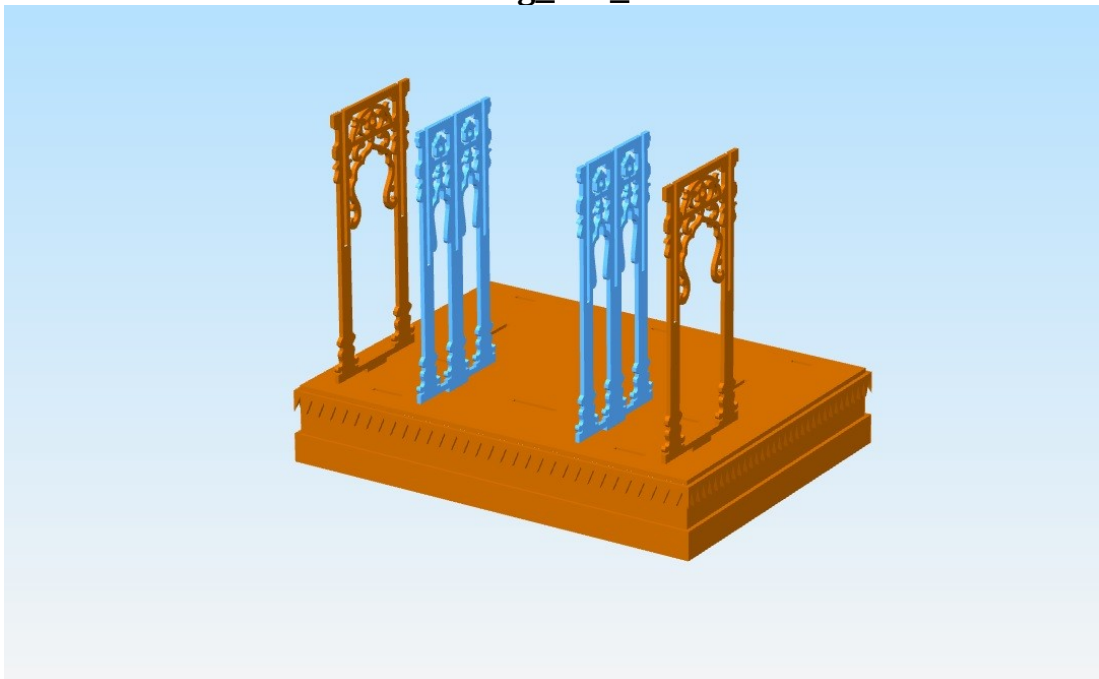
Building_Base_3.stl



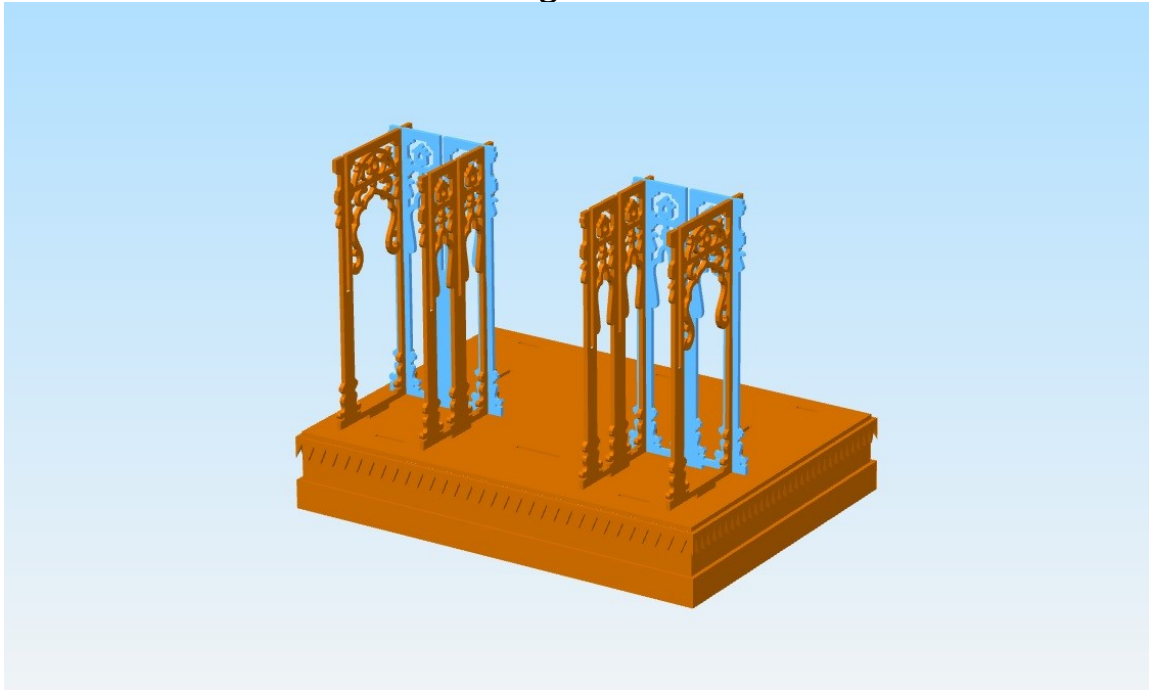
Building_002_x2.stl



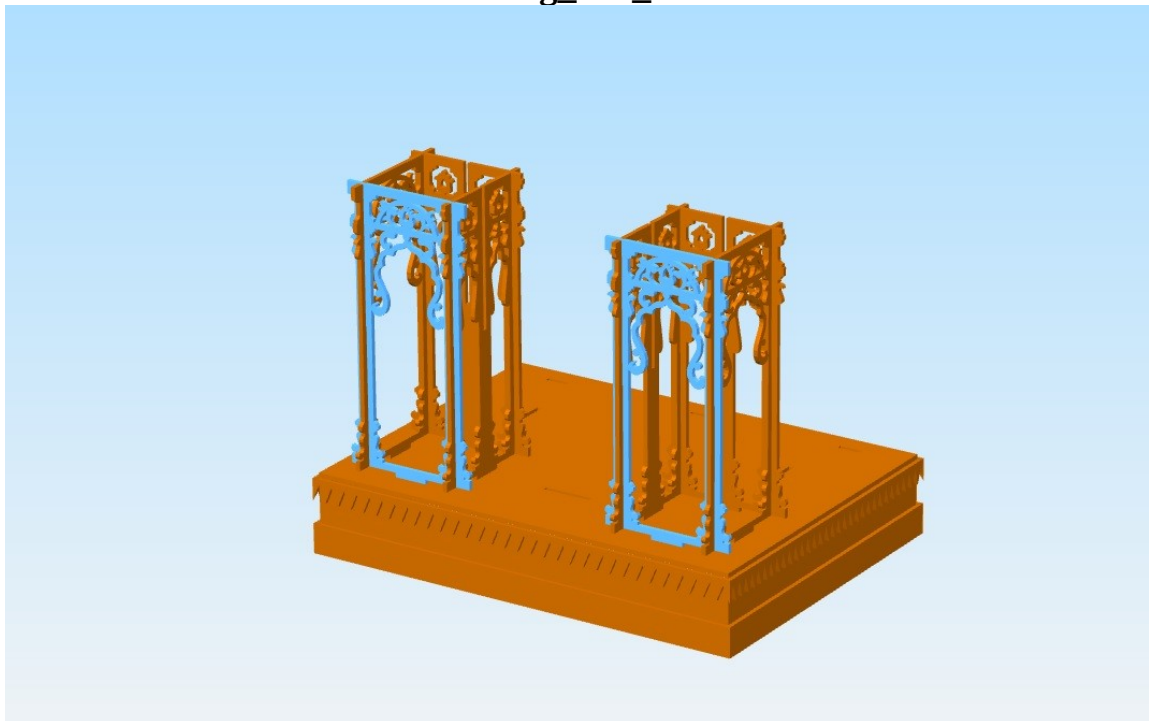
Building_010_x2.stl



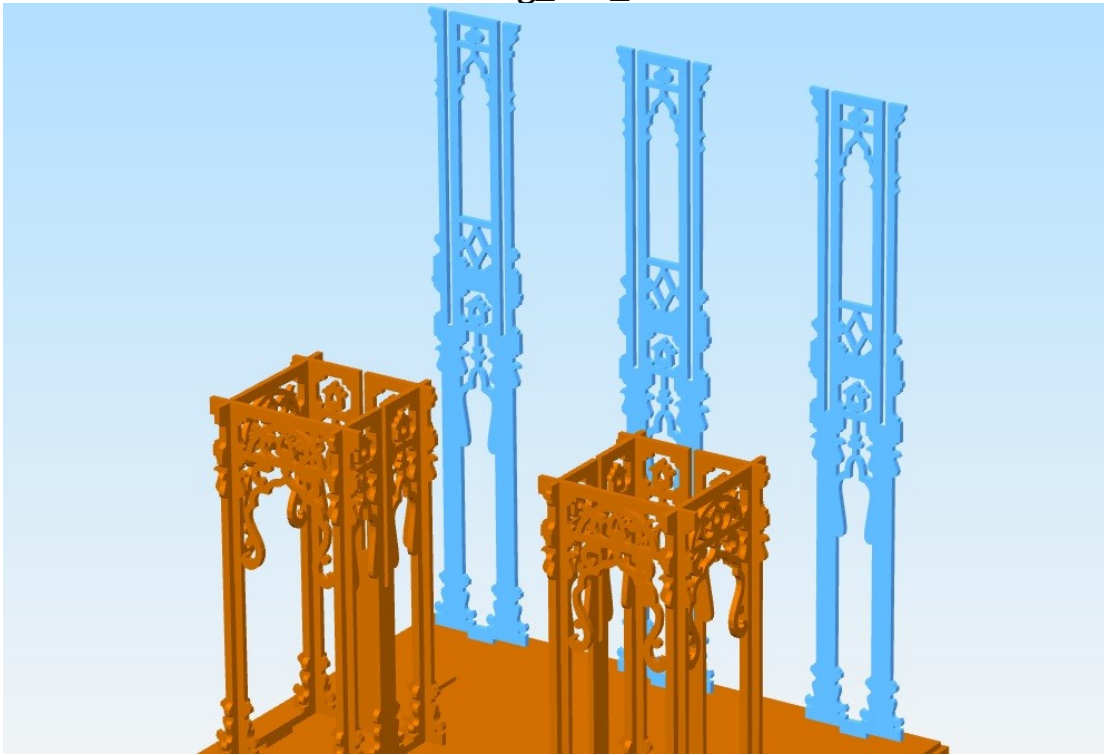
Building_013_x2.stl



Building_019_x2.stl

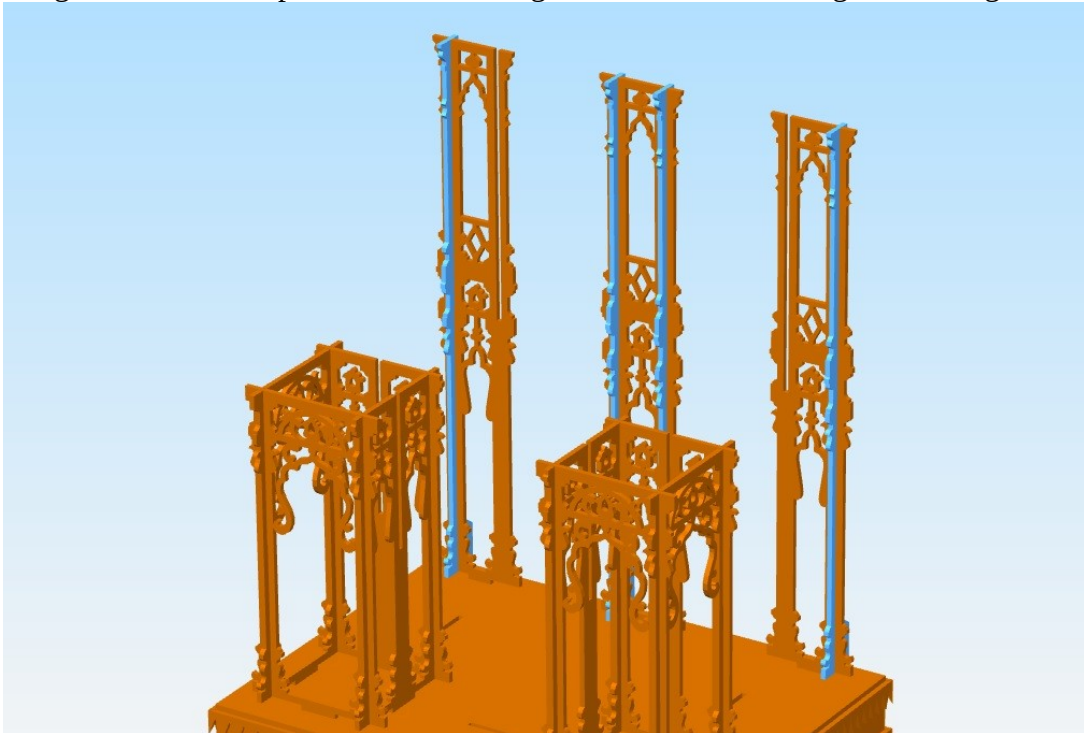


Building_494_x3.stl



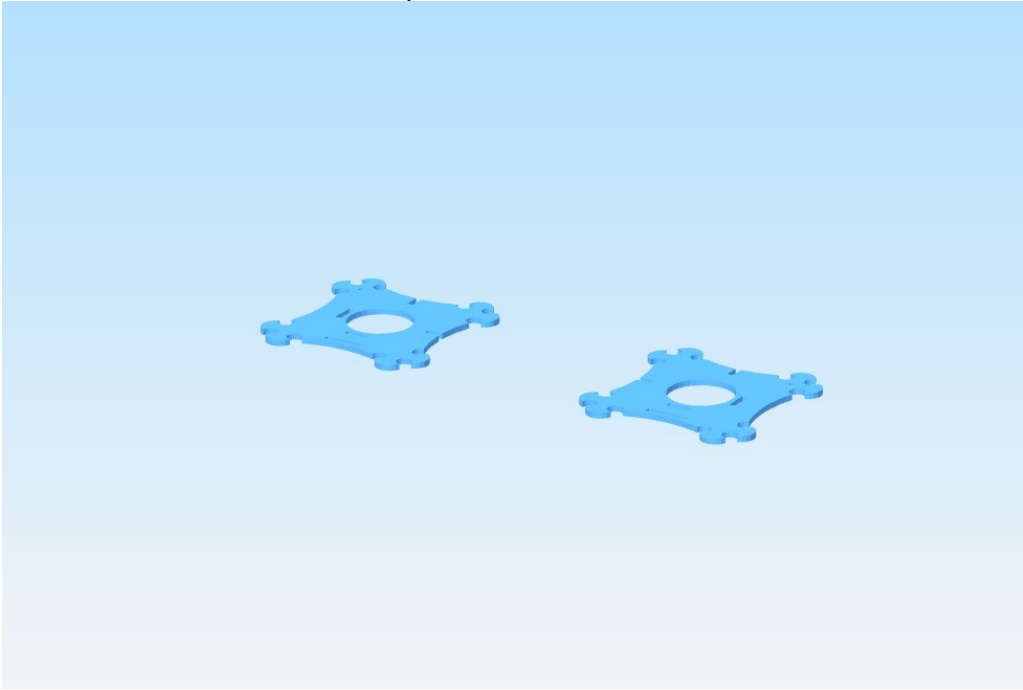
Building_505_x4.stl

Two of these go on the middle part. The other two go on the OUTSIDE edges of the right and left parts.



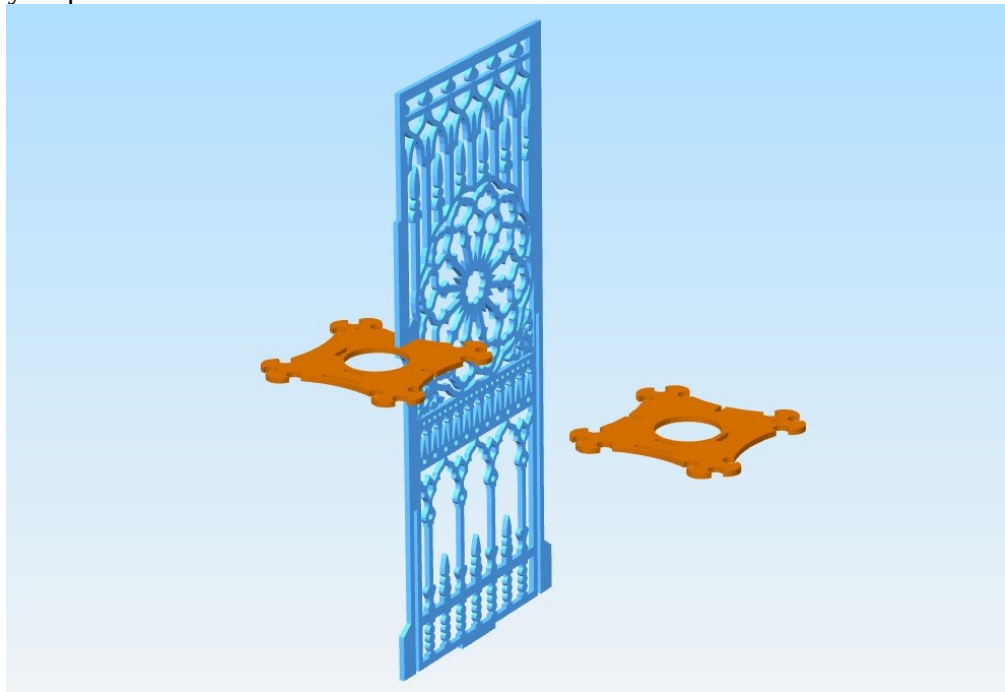
Building_032_x2.stl

The following 5 parts should be assembled separate from the main model. The completed sub-assembly will mate with the main model in a later step.



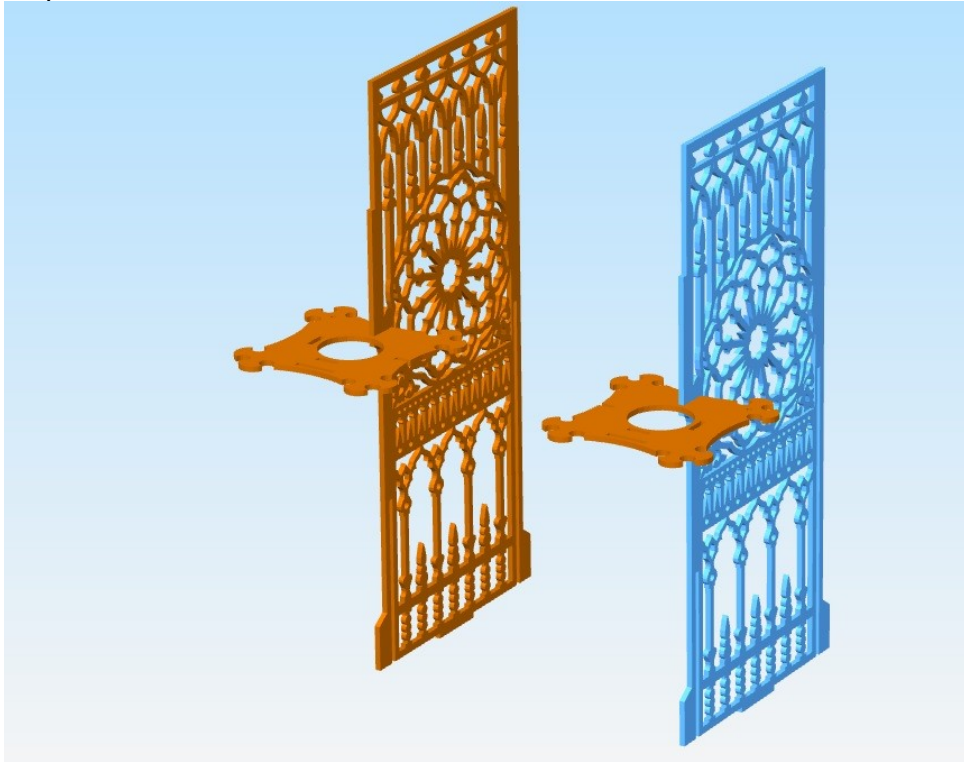
Building_044.stl

Sub-assembly step 2.



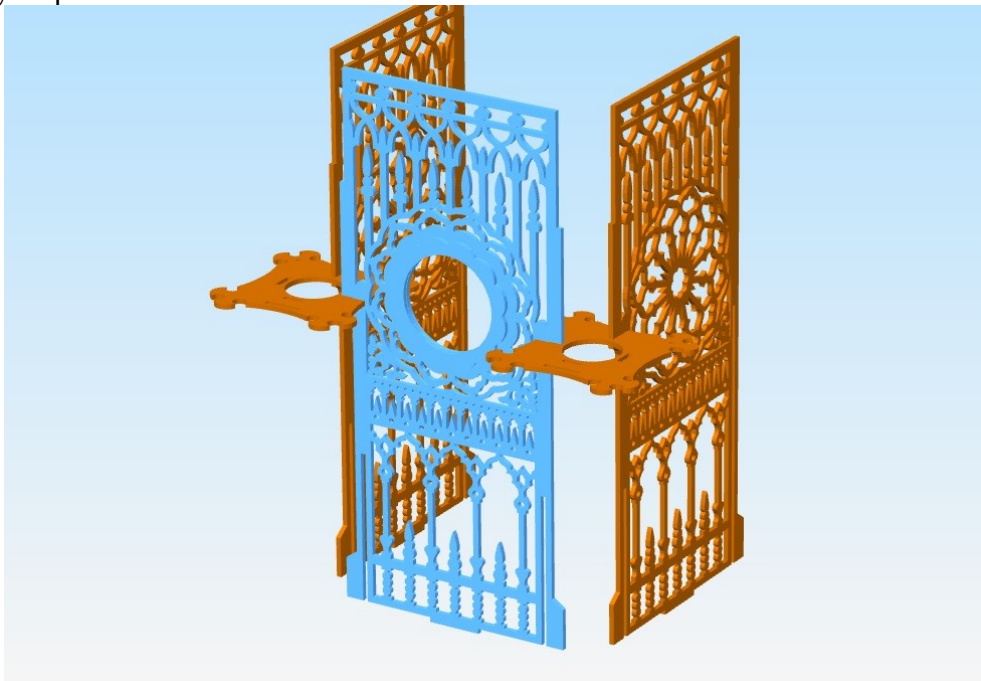
Building_043.stl

Sub-assembly step 3

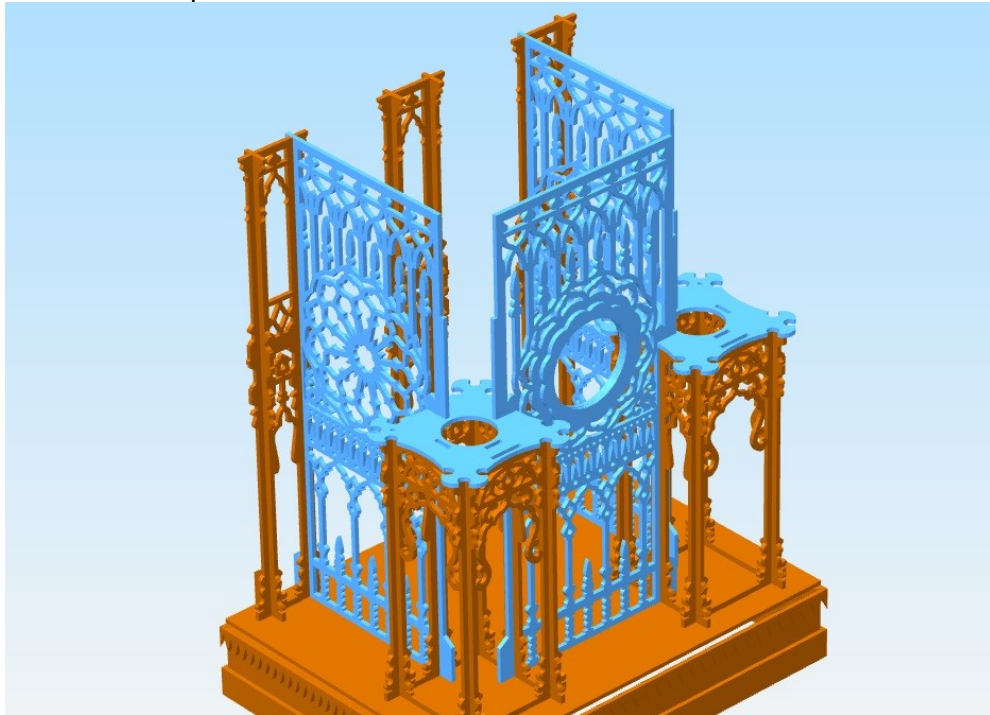


Building_030_031.stl

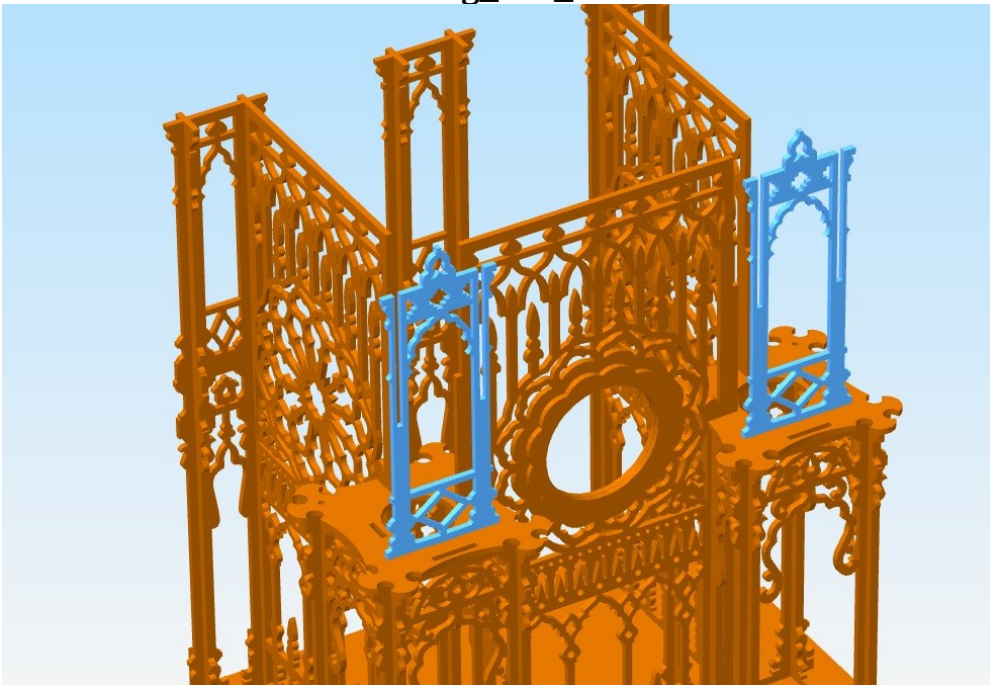
Sub-assembly steps 4 and 5



Sub-assembly attached to the main model. Note that both sides of the three upright parts of the sub-assembly need to slide into parts on the main model.

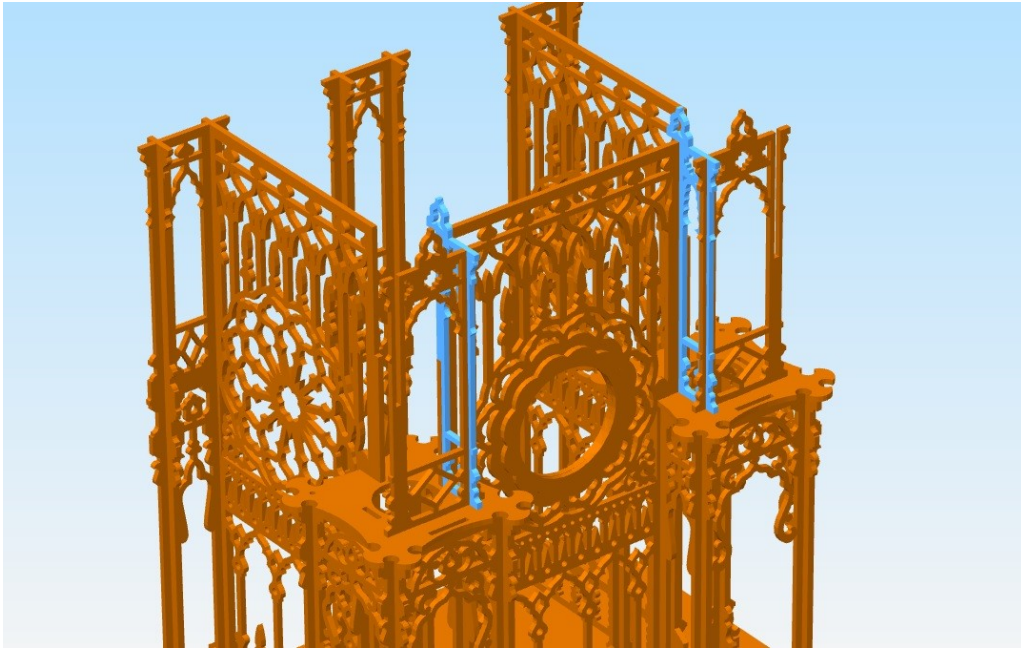


Building_034_x2.stl



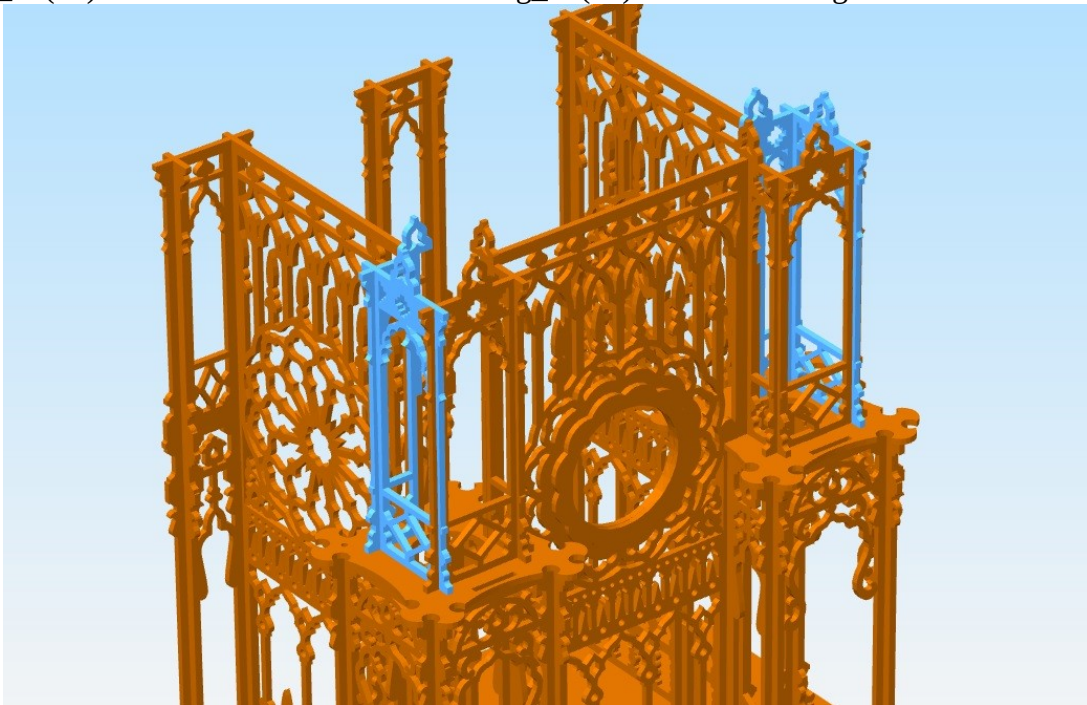
Building_035_x2.stl

These parts do not have tabs.

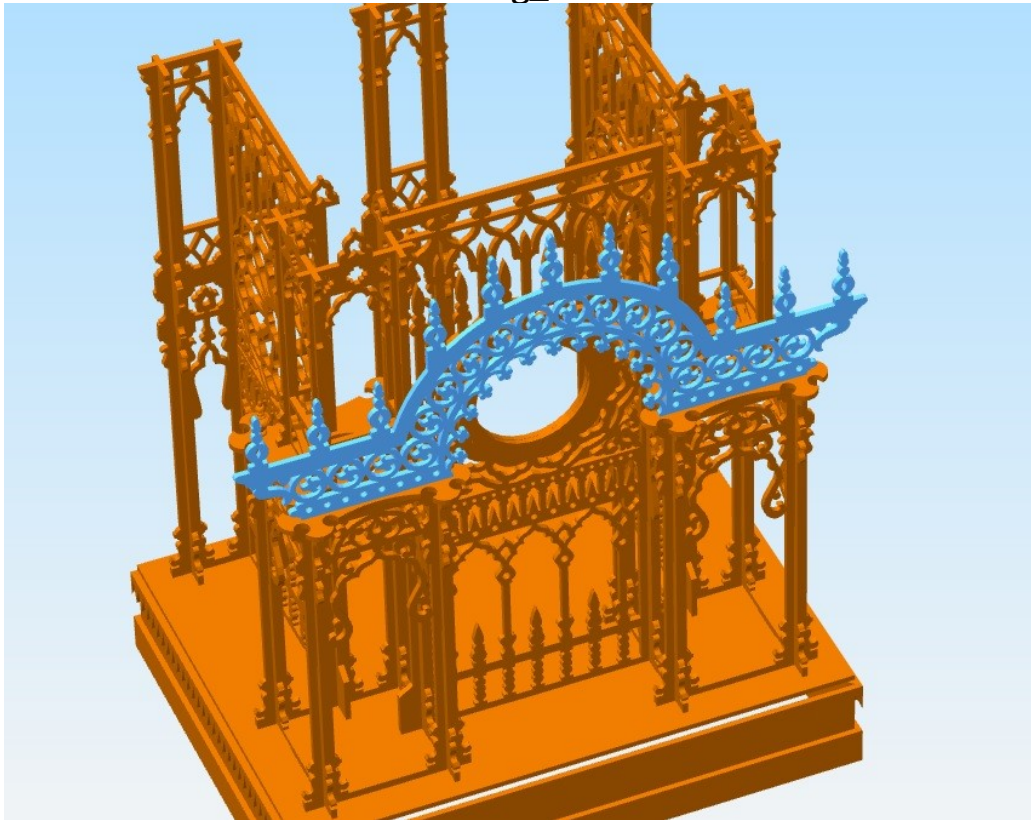


Building_036_x2.stl and Building_037_x2.stl

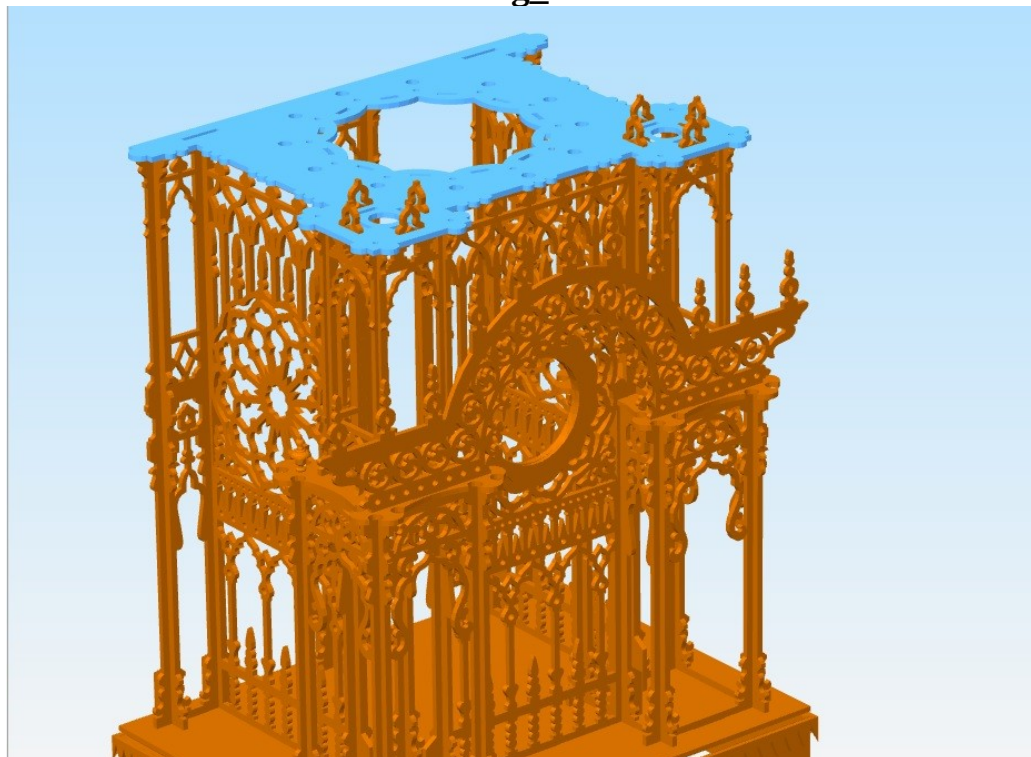
Building_01(36) must be assembled with Building_01(37) before attaching to the main model.



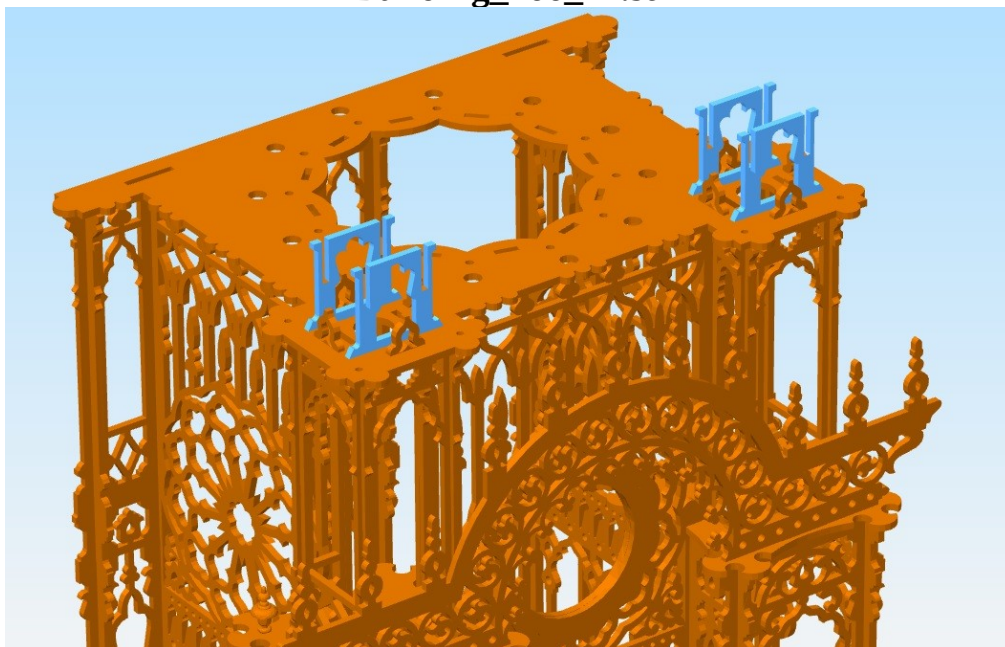
Building_042.stl



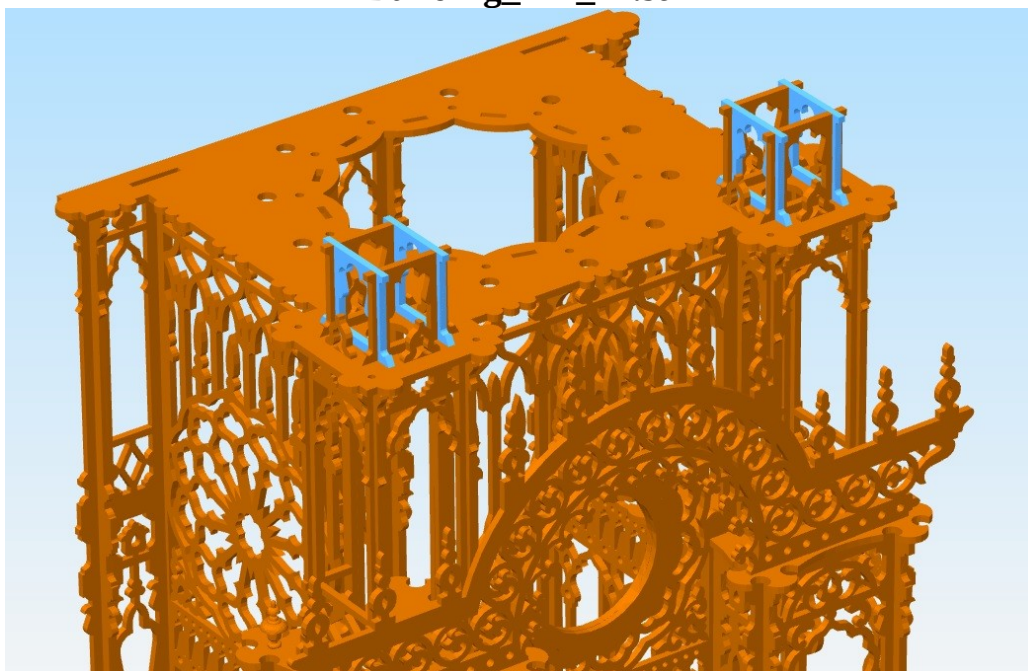
Building_045.stl



Building_166_x4.stl

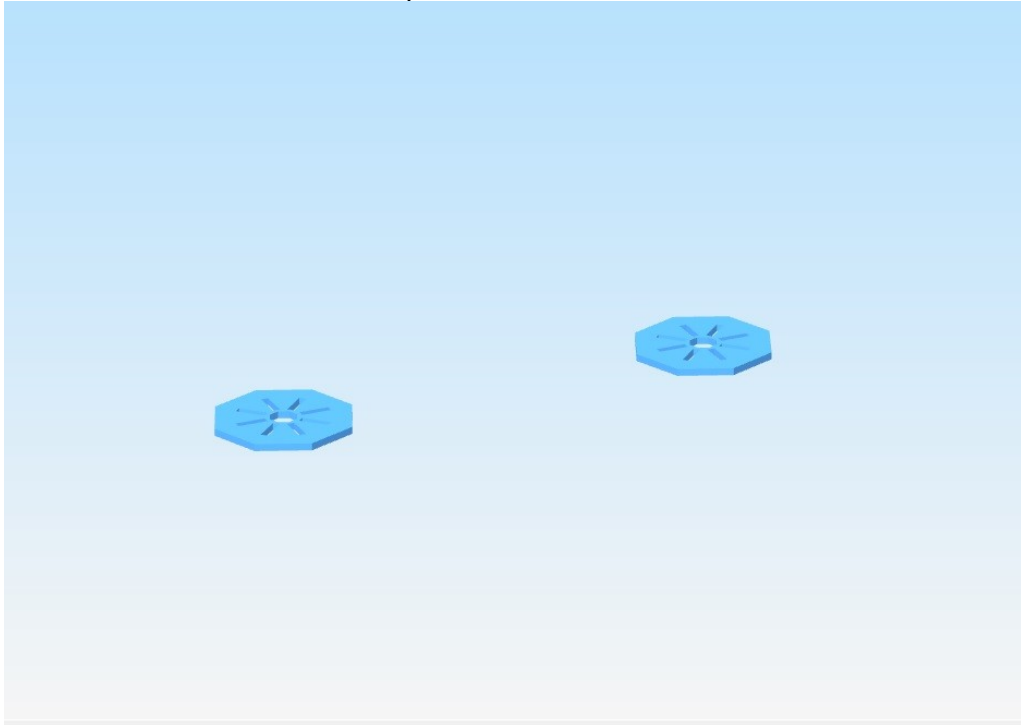


Building_174_x4.stl



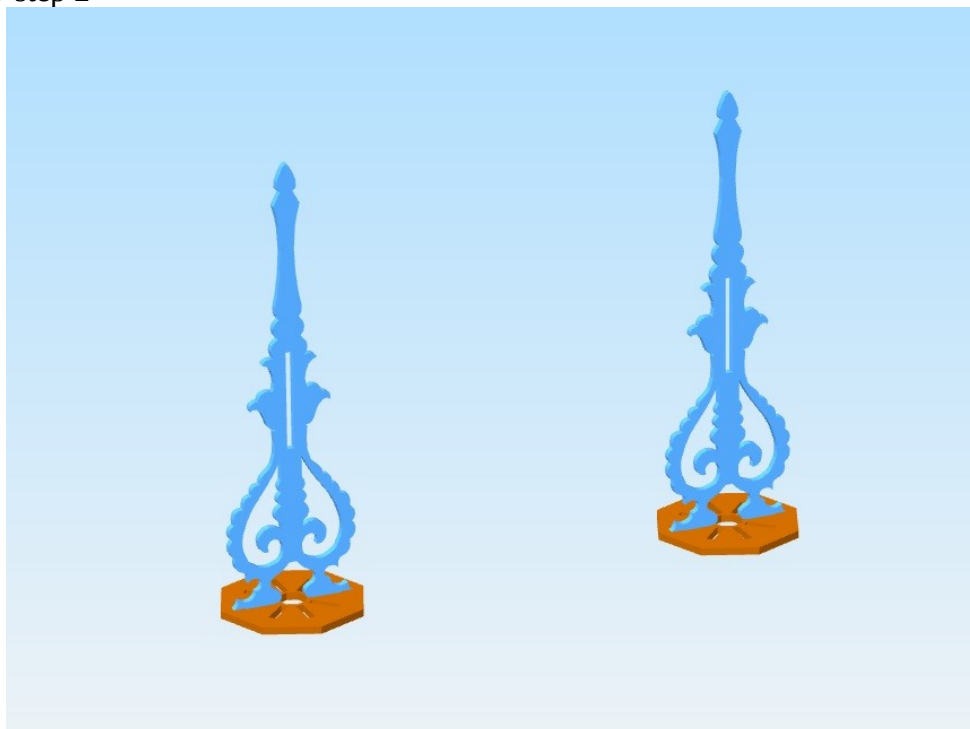
Building_472_x2.stl

The following parts should be assembled separate from the main model. The completed sub-assembly will mate with the main model in a later step.



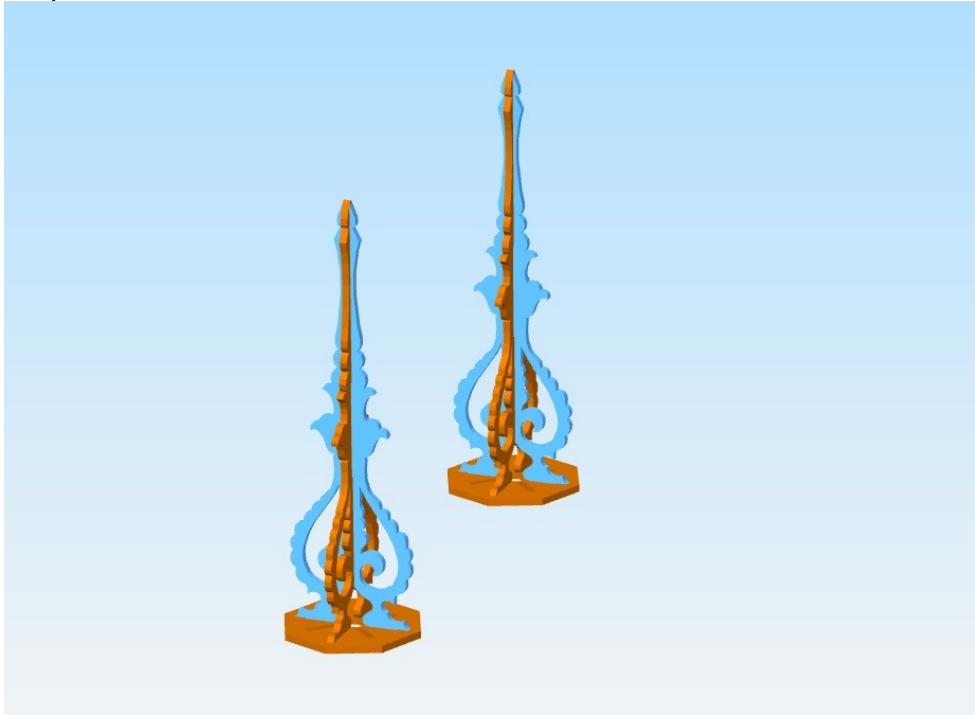
Building_473_x2.stl

Sub-assembly step 2



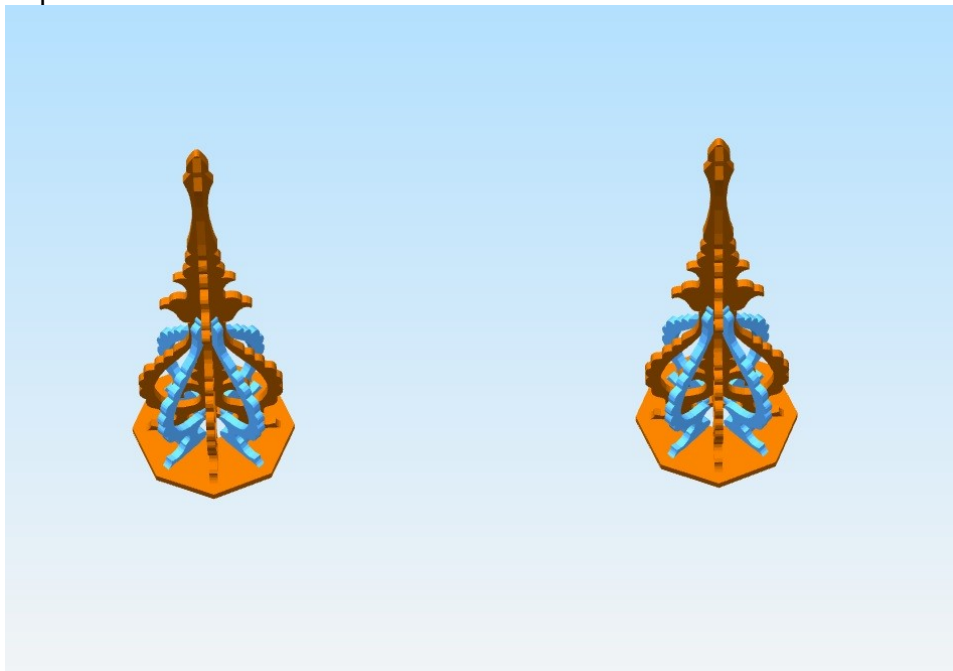
Building_475_x4.stl

Sub-assembly step 3

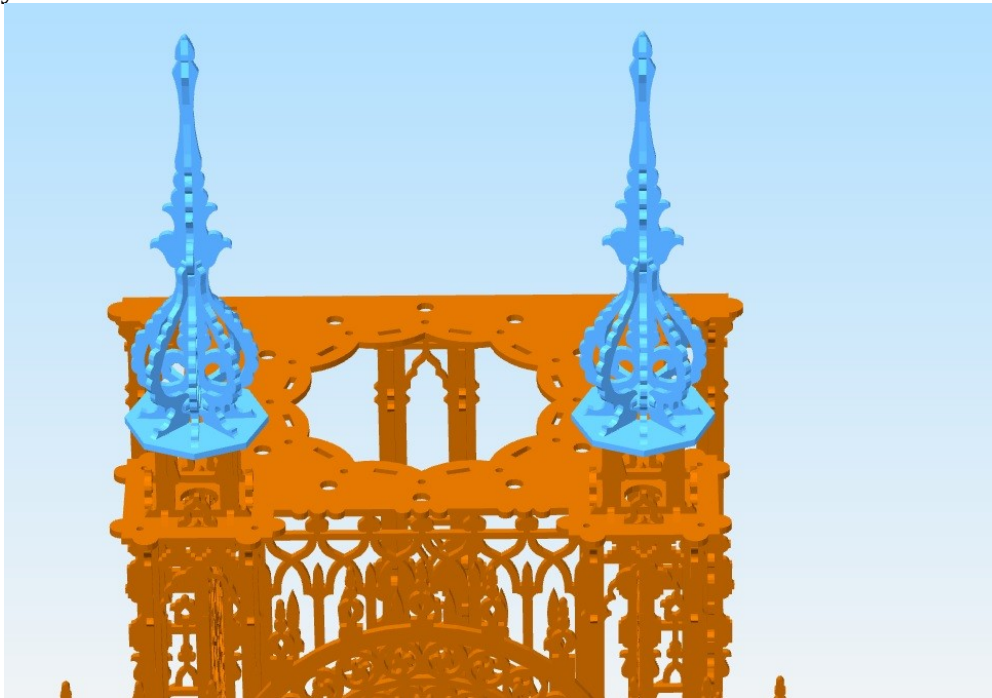


Building_479_x8.stl

Sub-assembly step 4

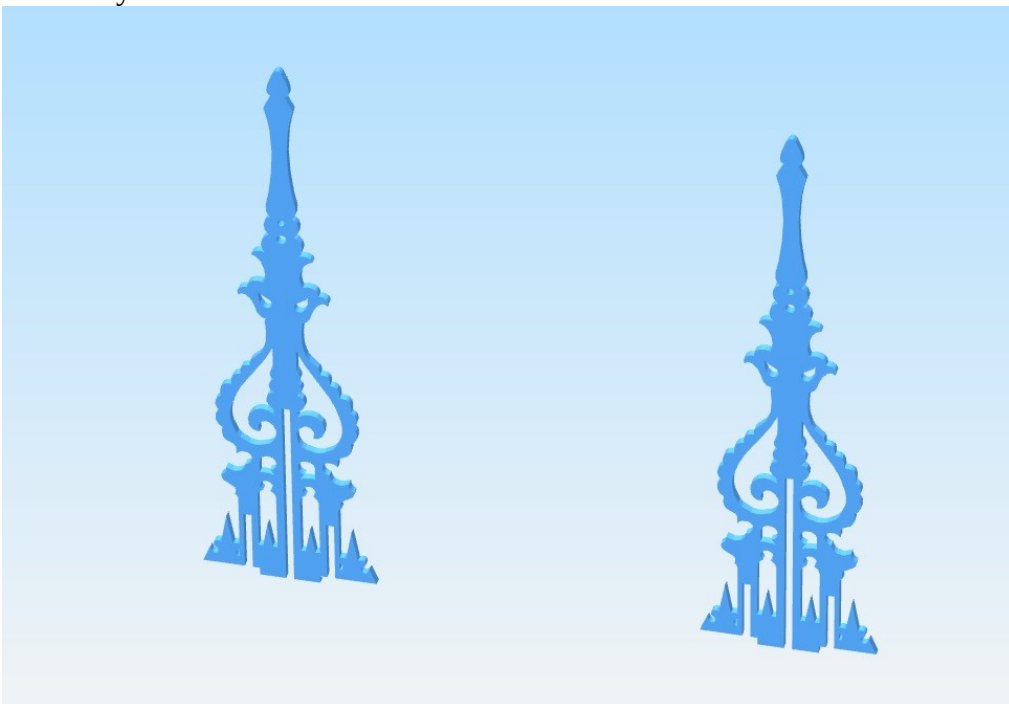


Sub-assembly attached to the main model.



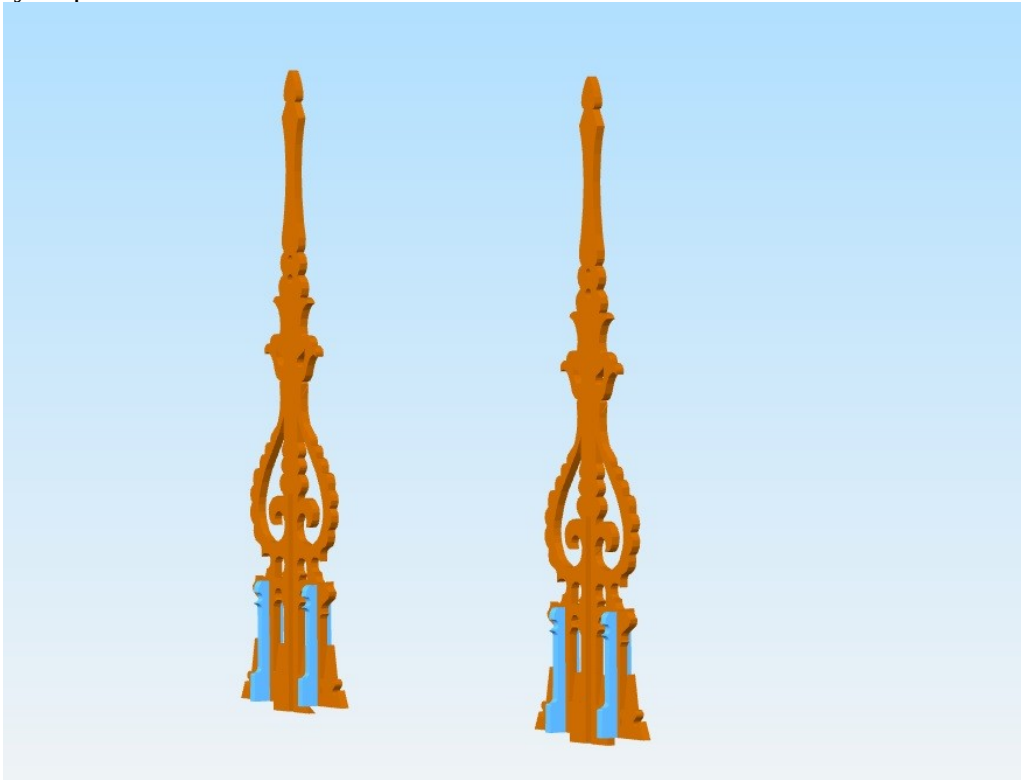
Building_518_x2.stl

Another sub-assembly.



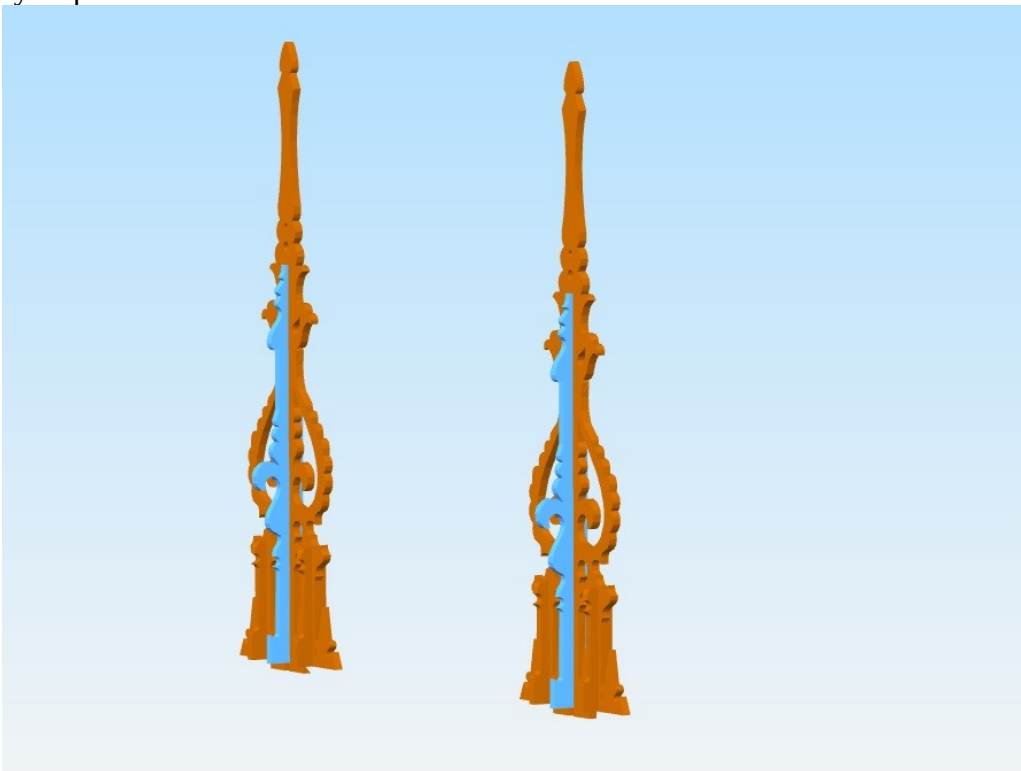
Building_529_x4.stl

Sub-assembly step 2



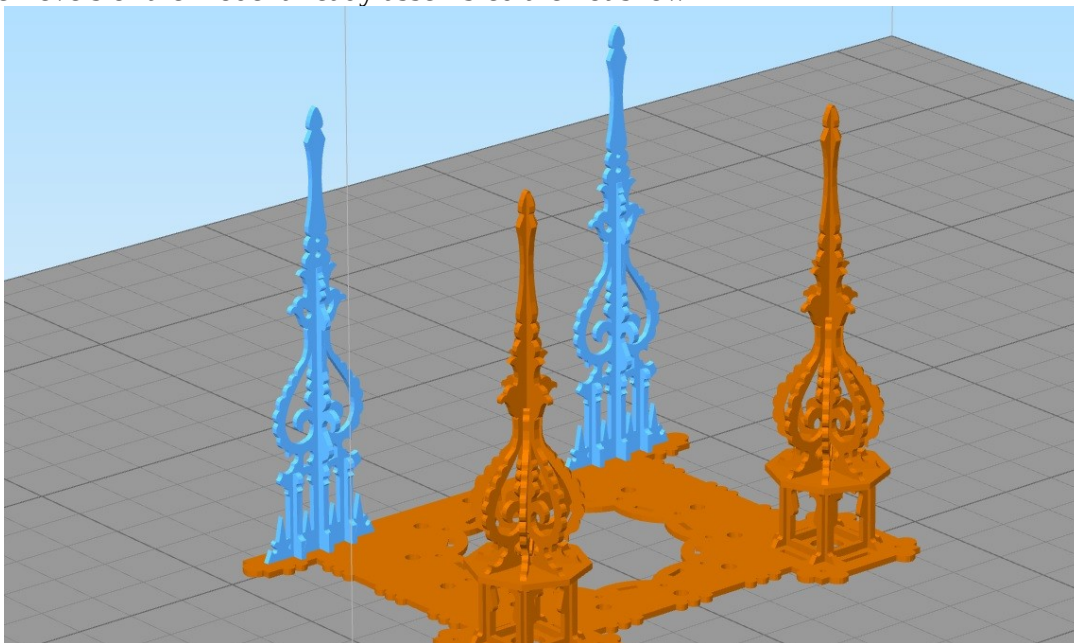
Building_526_x2.stl

Sub-assembly step 3



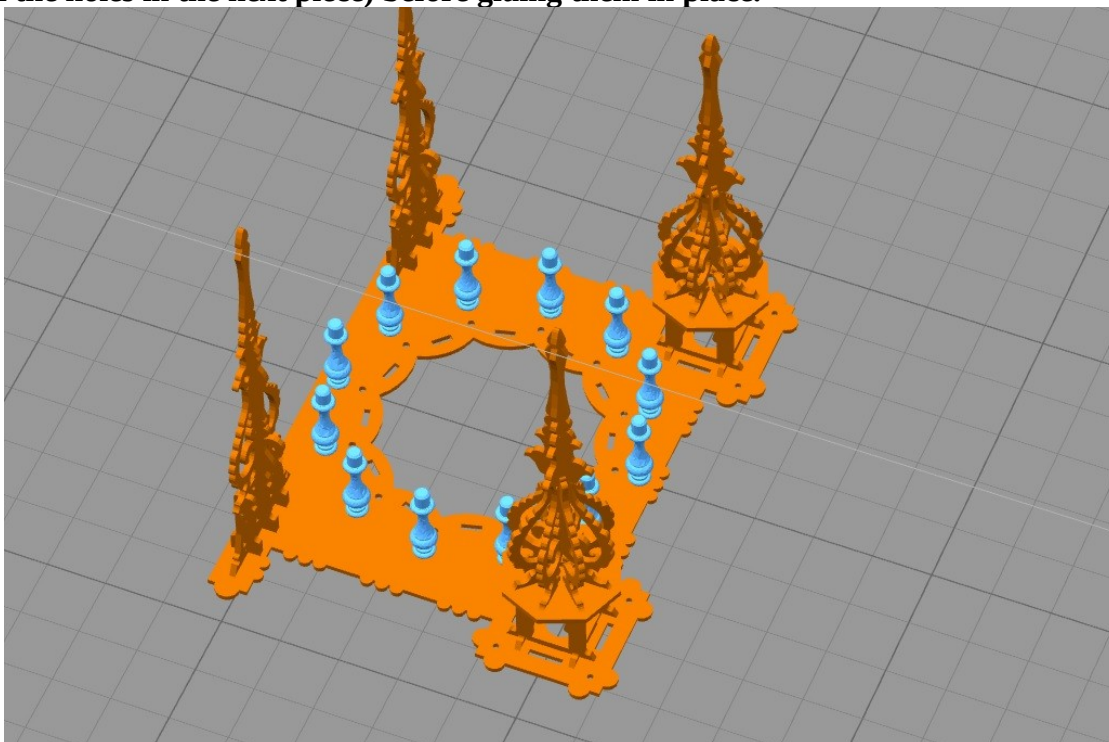
Sub-assembly attached to the main model.

(The lower levels of the model already assembled are not shown)

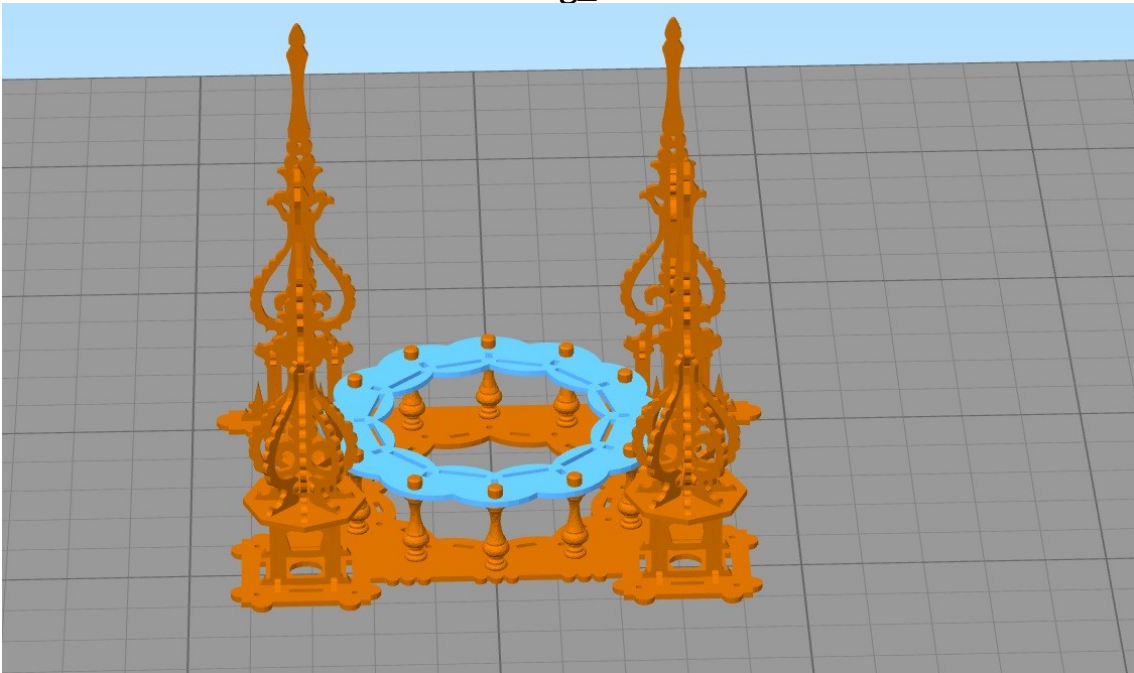


Building_272_x6.stl

This file needs to be printed twice – a total of 12 parts are required. A brim of 10-15 lines is suggested when printing these parts. **Test fit the top of these with the part in the next step (the tops need to fit through the holes in the next piece) before gluing them in place.**

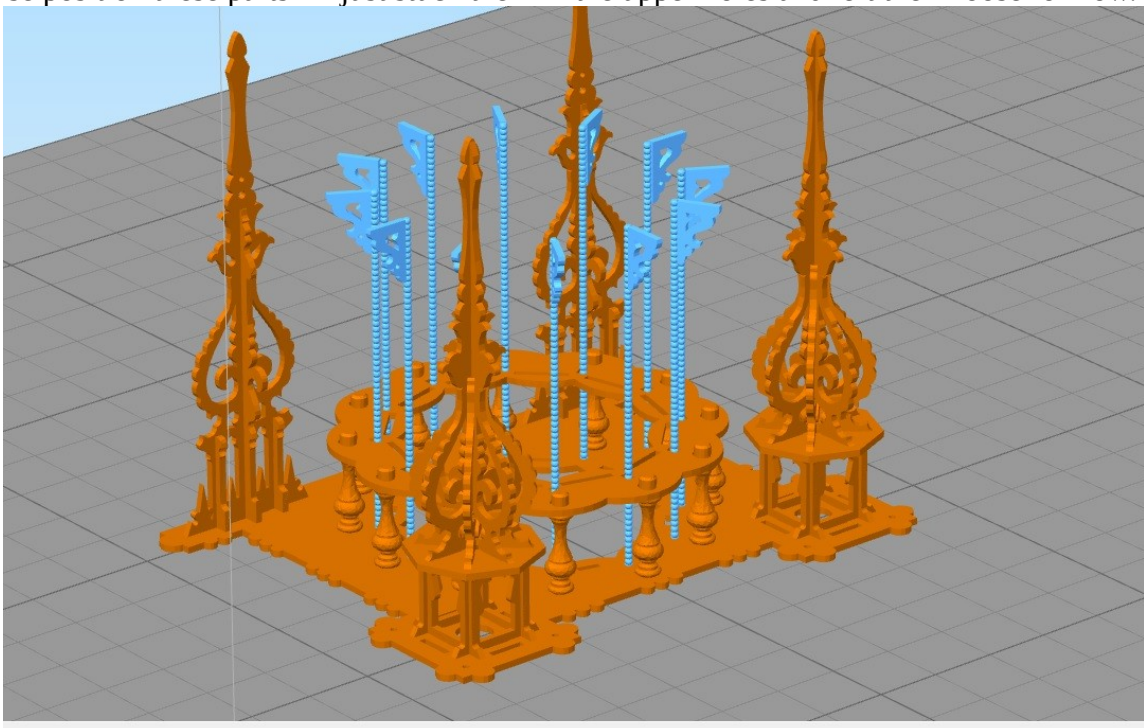


Building_226.stl



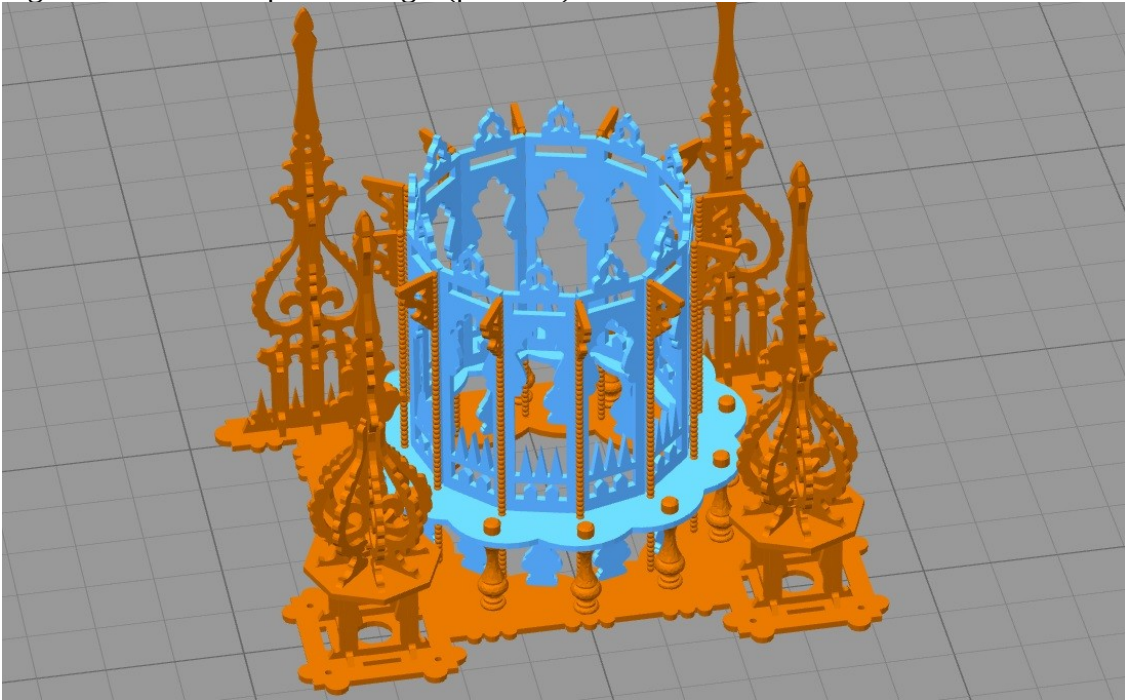
Building_305_x6.stl

This file needs to be printed twice – a total of 12 parts are required. I did not try to straighten or otherwise position these parts – I just stuck them in the upper holes and left them loose for now.



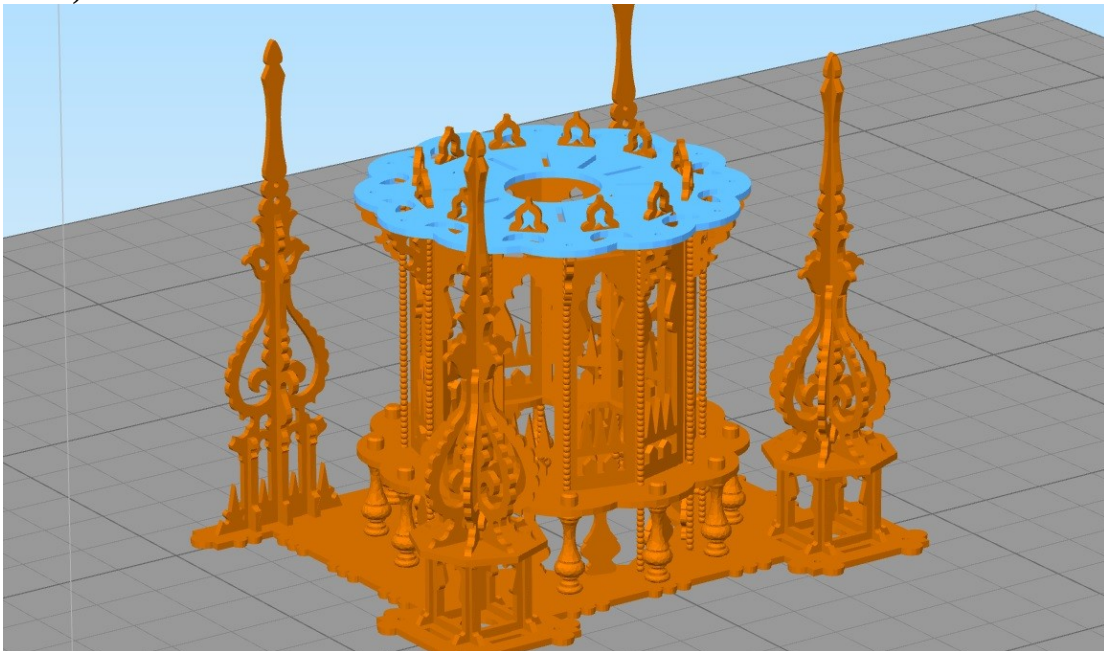
Building_253_x6.stl

This file also needs to be printed twice to get 12 parts. I glued these to the middle piece (226) to keep them straight for the next step. The 'flags' (part 305) are still left loose.



Building_336.stl

Once this piece is in place, I positioned and glued each of the 'flags' (part 305) to the top (part 336) by tipping the flag out, applying glue to the top edge of the flag, then positioning it while pulling it up against the bottom of part 336 (the bottom of the flag may not fully seat in the bottom hole – don't worry about it).



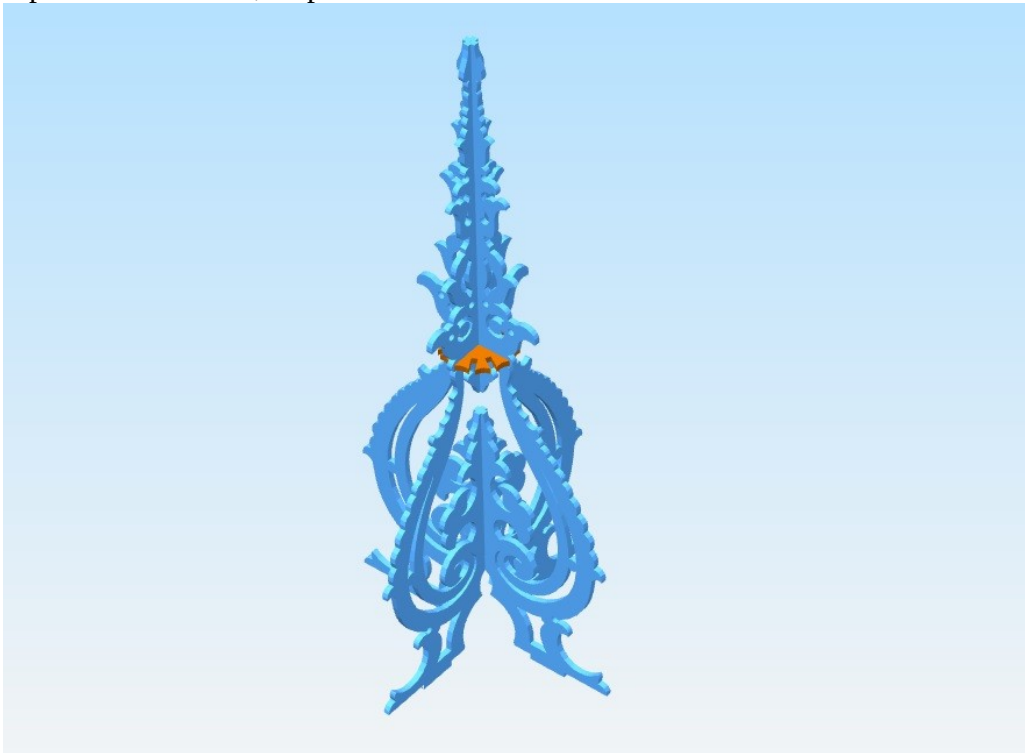
Building_461.stl

First piece of the last sub-assembly.

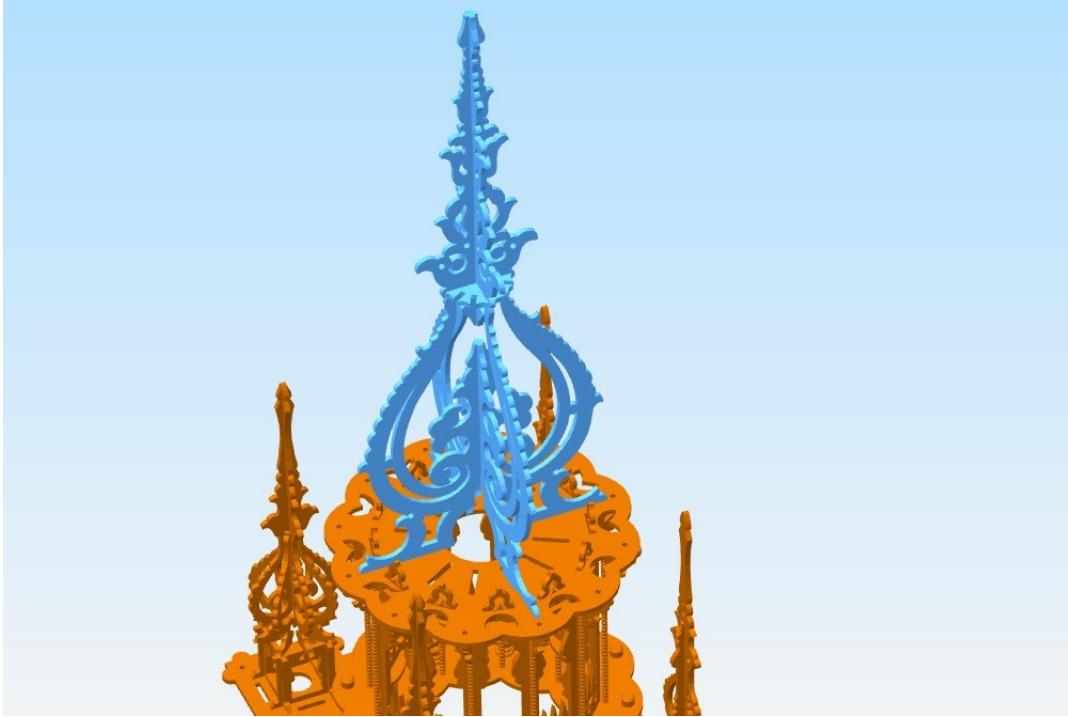


Building_443_x2.stl

Four of these pieces are needed, so print this file twice.

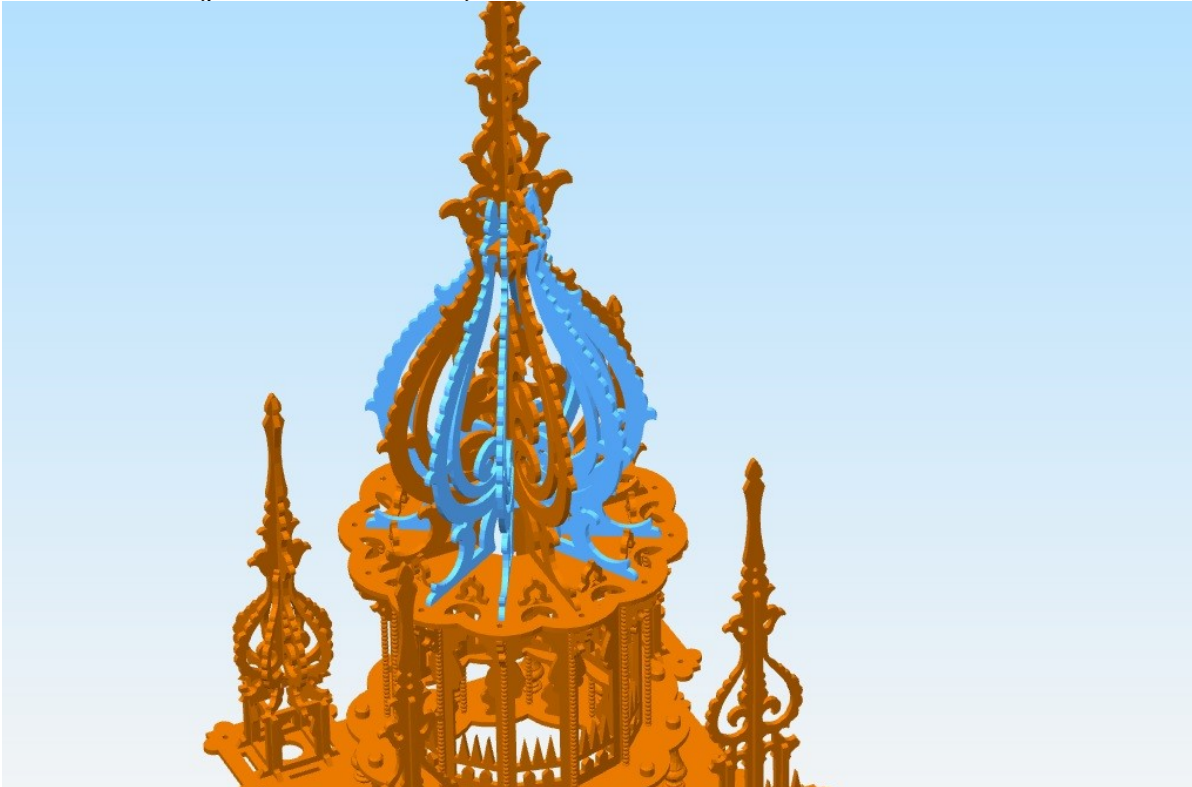


Then attach the 5 piece sub-assembly to the model.



Building_466_x2.stl

A total of 8 of these (print the file 4 times) will finish the model.



Building_335.stl

I was not able to successfully print this part and did not include them in my model. A total of 20 of these are on the original – 2 on the first level, 6 on the next level up, and 12 around the top. There are holes for them, so you can give it a try – maybe you can do better than I did.

