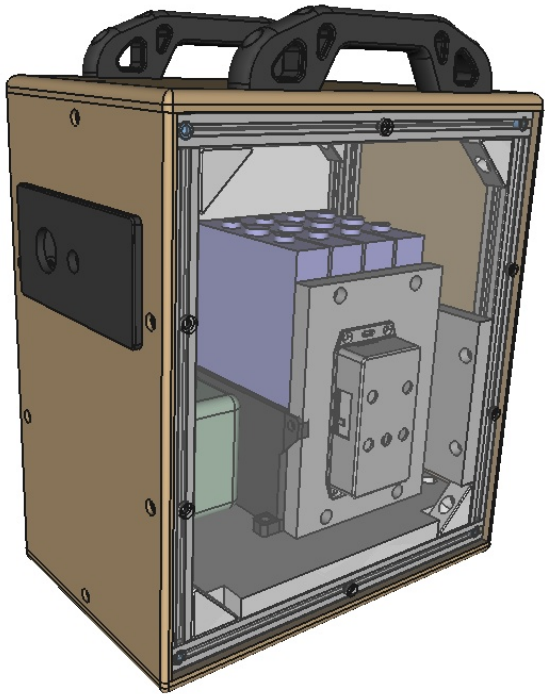
Universal Prototyping Kit



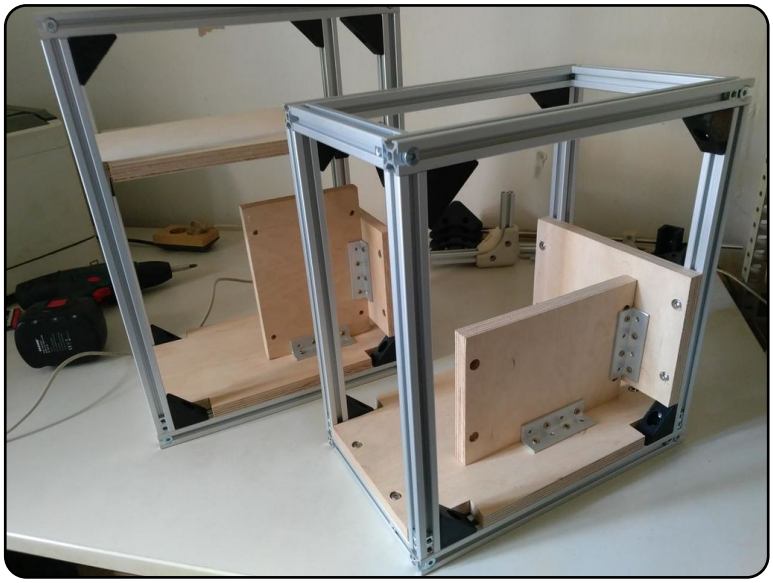
UniProKit Box-Set UPKlib V. 2.02
Boxframe V.2 mobile Assembly Guide

by OpenEcoLab Rahden, 08/2018

OPEN SOURCE ECOLOGY GERMANY

Assembly Guide for the UniProKit Box-Set Boxframe V.2 mobile

This guide gives a graphical step by step instructional on how to assemble the Box-Kit . Normally one would assume that its quite easy and you can do this intuitively. This is true in principle.



But in practice you may find it a bit tricky, to pre-place the needed nutplates into the right slot for later use, eg. if you have finished the naked frame and then want to add the cover-plates or other interieur which assumes that there is already an appropriate nutplate in place, or better said in one certain slot of the extrusion-profile.

Depending on the stage of the assembly process it can either be still possible to move a nutplate into a slot, or not, Especially as more as you build up the frame some slots may be blocked eg. by the cornerscrews or by other beams. In this case there should already be one or more nutplates enclosed into the slot.

So its the best, to follow a certain choreography, movin some nuts into slots, then assemble a beam which encloses them.

Then again move some nuts into just these slots, which will be enclosed in the next assembly-step.

The guide aims to keep you an overview, which nuts to insert into which slot at a given step and then shows the next assembly step, to help you avoid forgetting some nutplates and having to disassemble later certain corners for moving the forgoten nutplates into it.

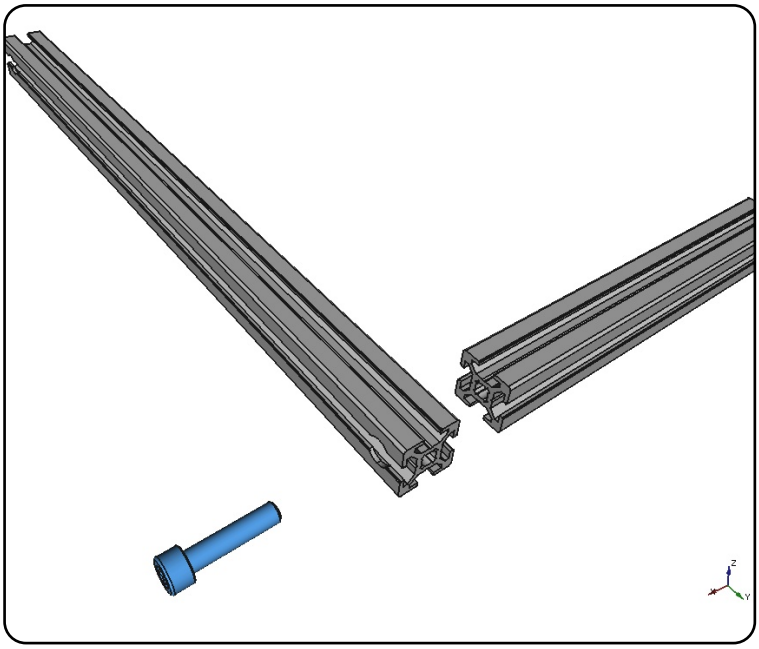
It's a bit like solving a rubiks-cube, as long as every step is applied at the right time and the right order, solving the puzzle is quick and easy.

Furthermore we start with building the upper frame, the lower frame and the upright pillars as sub-assembly-groups, before connecting all totgether to a threedimensional frame-structure.

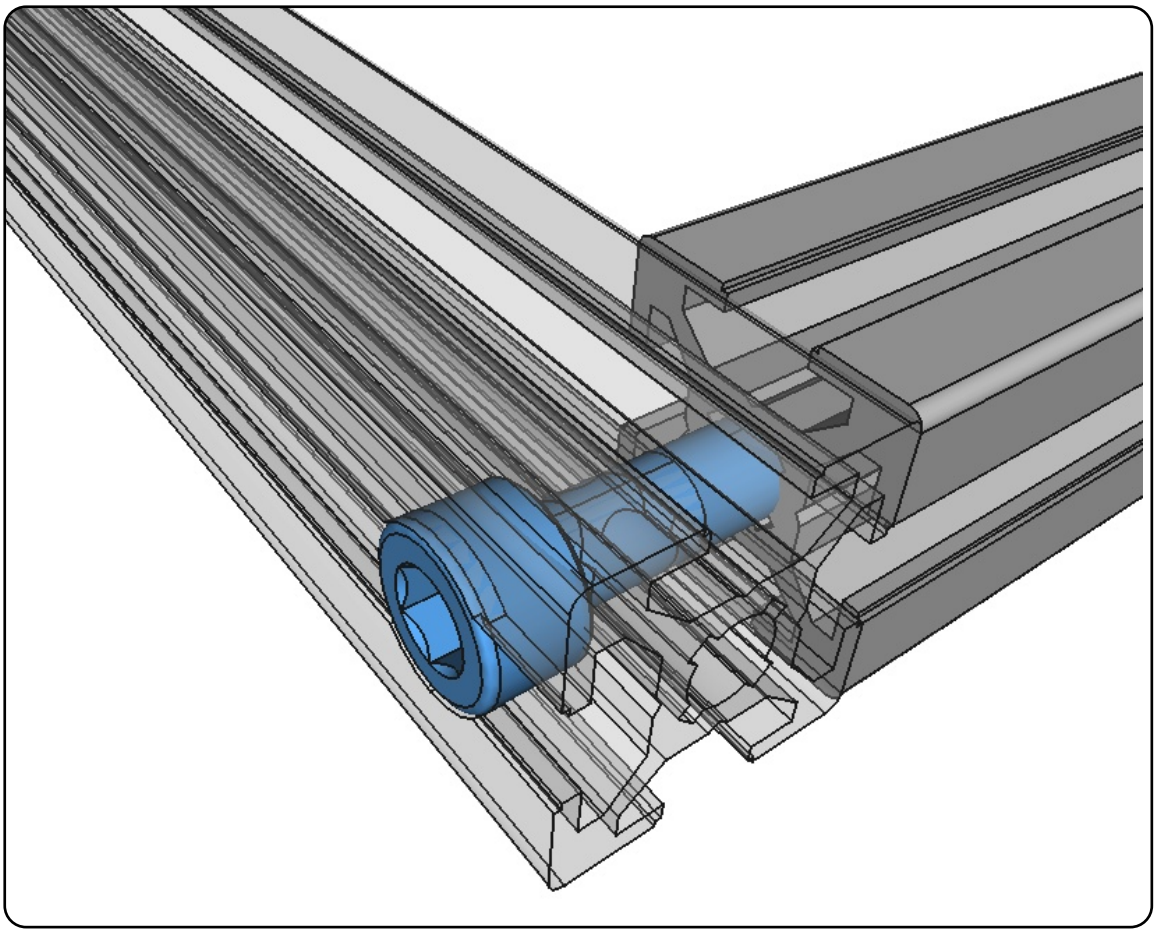
The upper frame

Needed Parts:

2 x Tslot32con
2 x Tslot16
4 x M6x25cyl
6 x M6nutplate

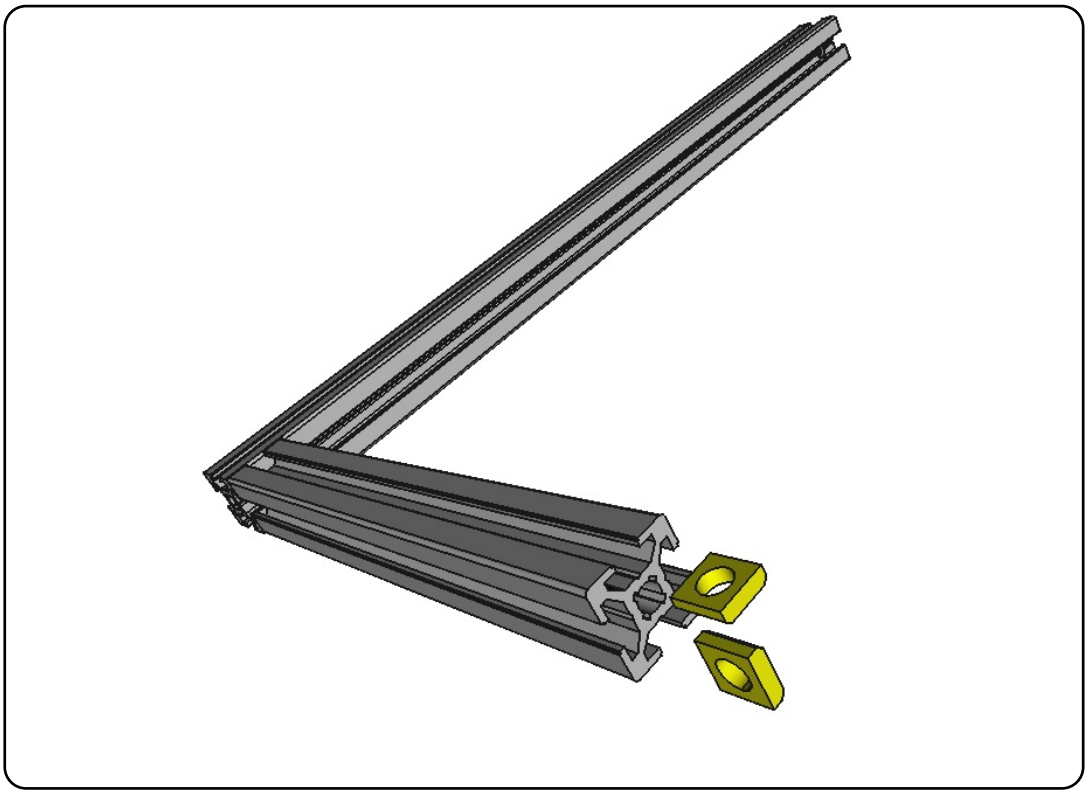


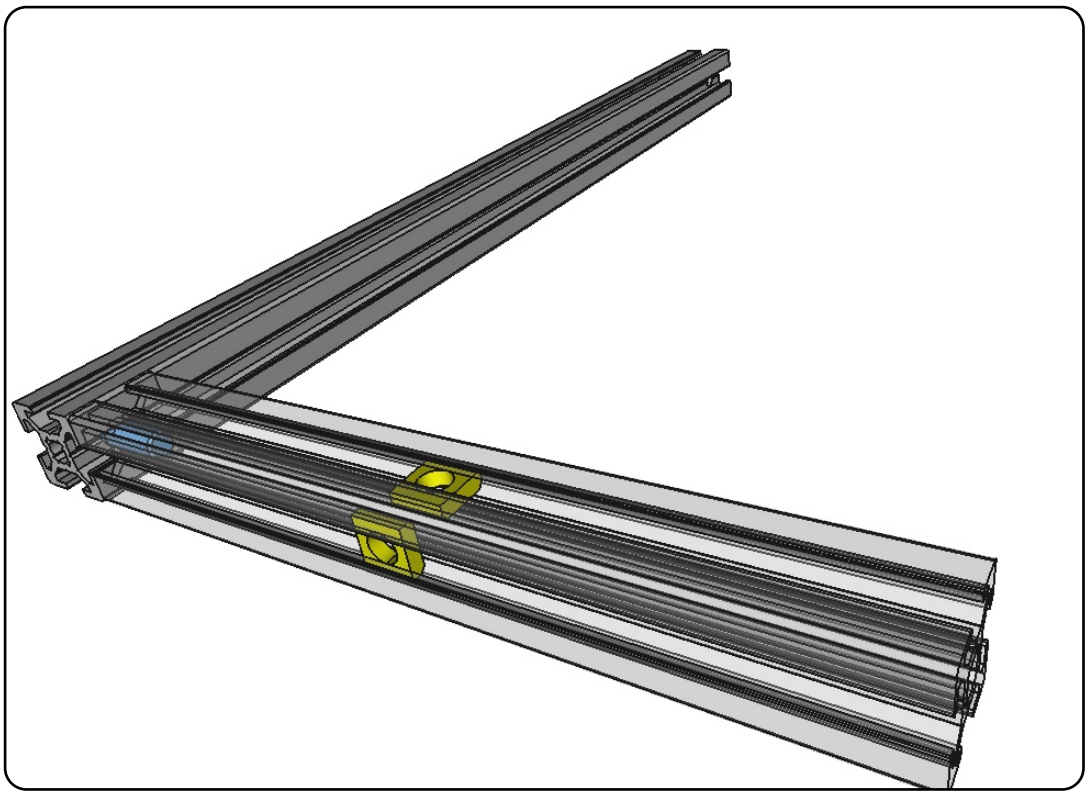
Step 1: Make a corner junction between aTslot32con and Tslot16 by a M6x25cyl screw.



The upper frame

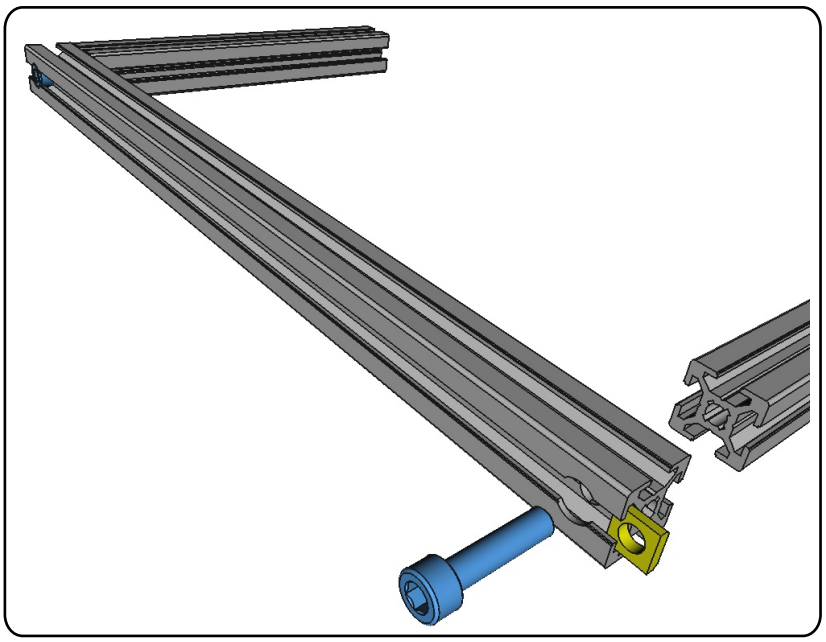
Step 2: Insert two M6nutplates into the upper and the outer slot of the Tslot16-beam.

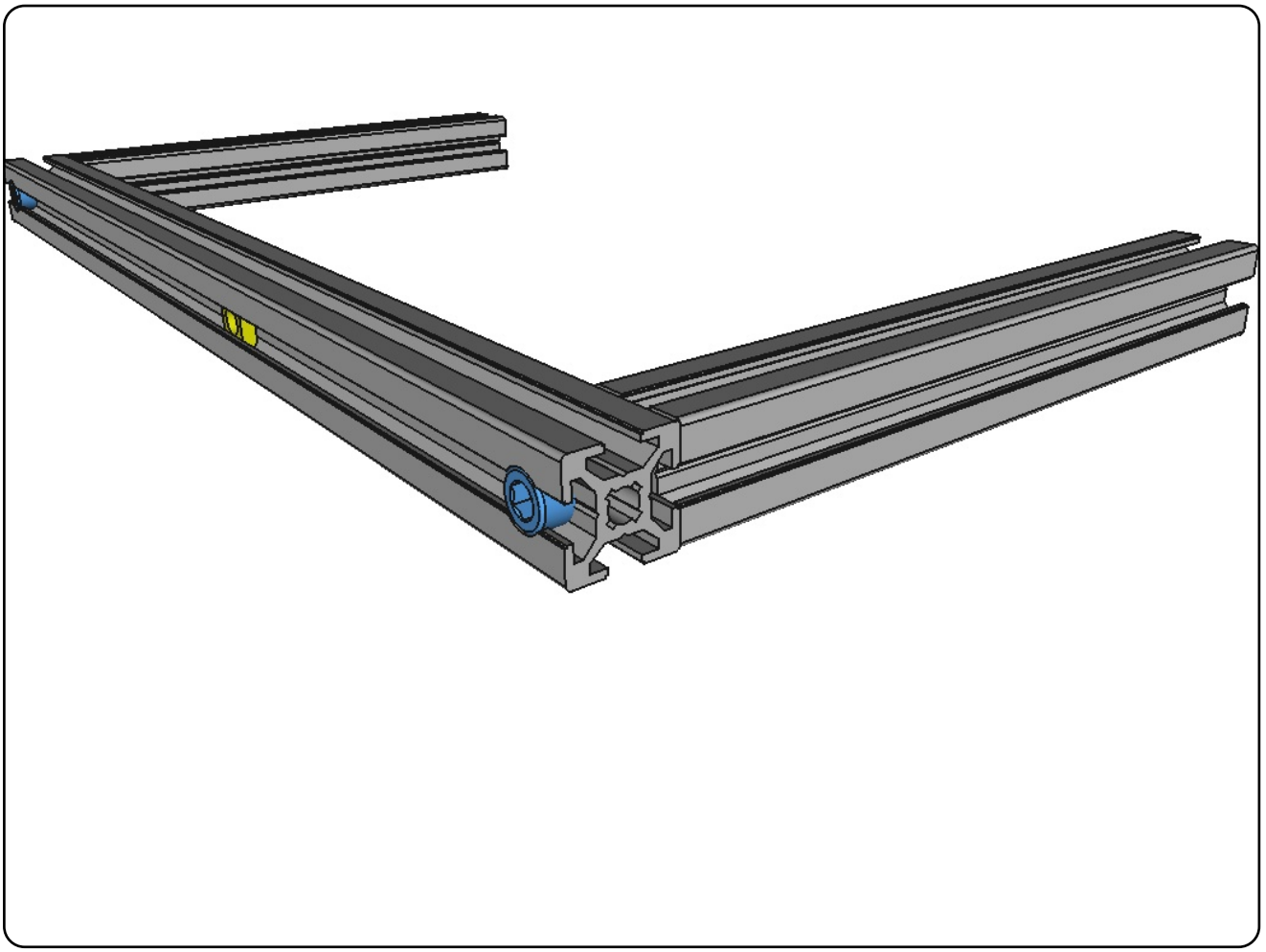




The upper frame

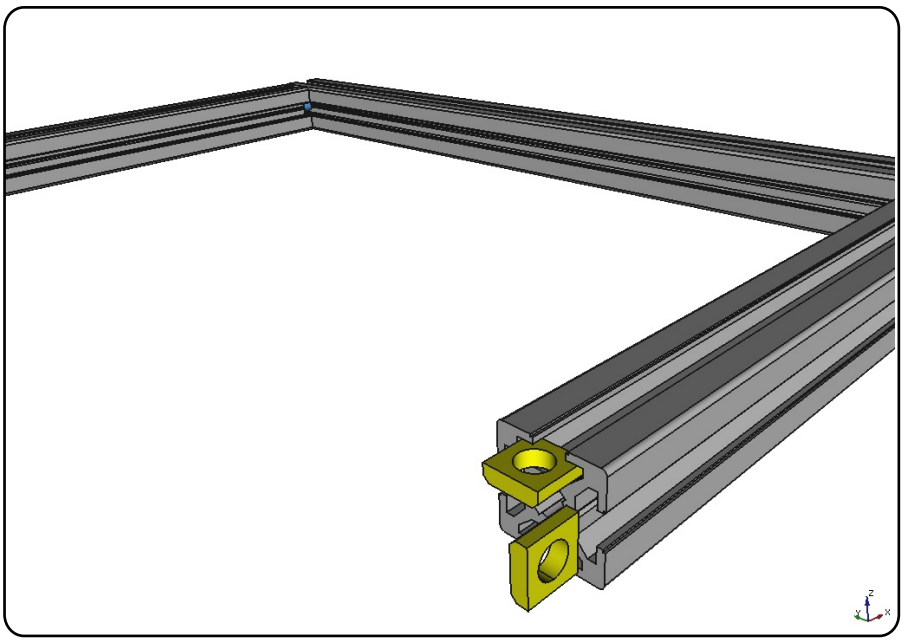
Step 3: Before connecting the second Tslot16-beam you must insert a nutplate into the outer slot of the long Tslot32con, which will be enclosed bei the M6x25cyl during the corner-connection.





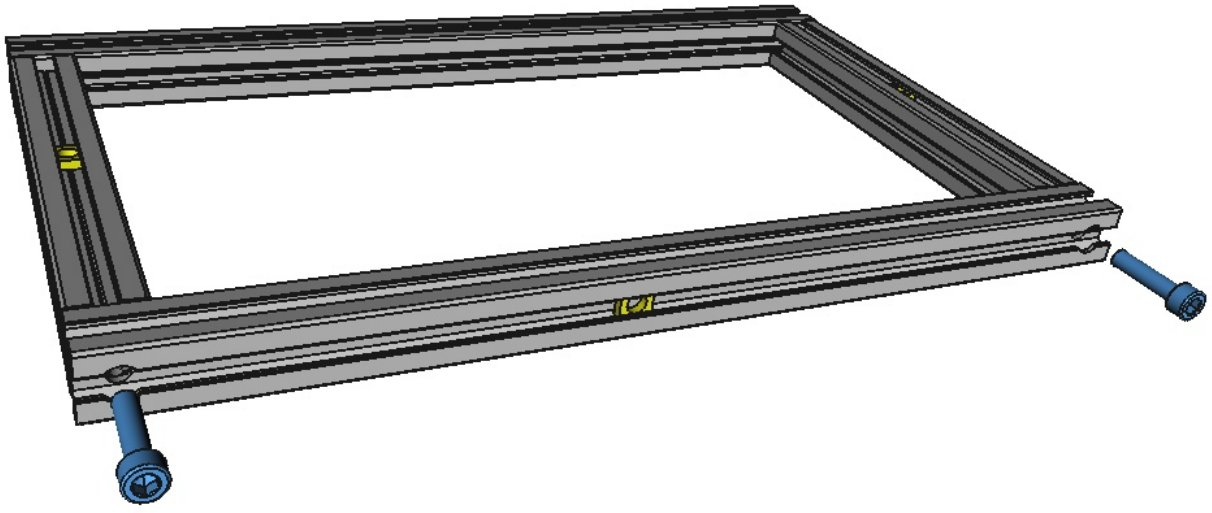
The upper frame

Step 4: Insert now two M6nutplates into the upper and the outer slot of the second beam.



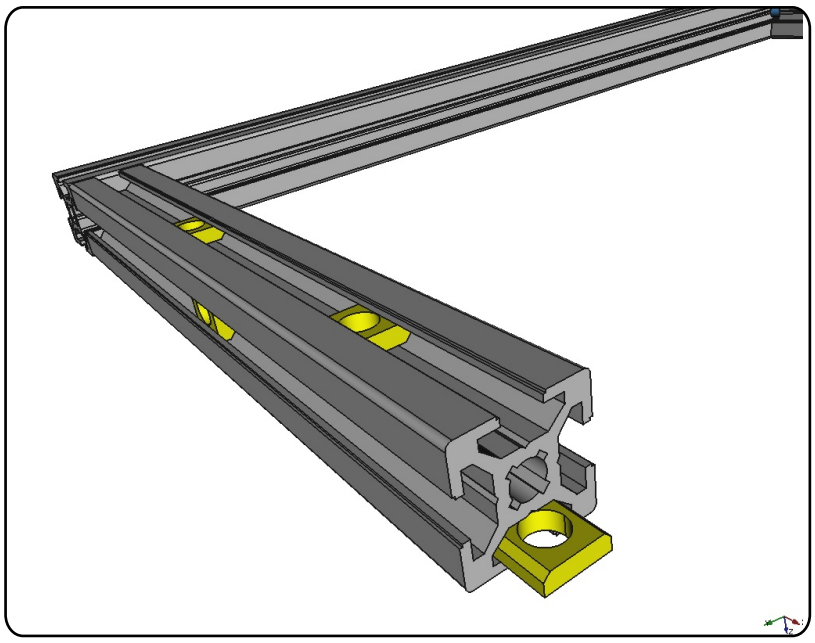
If that is done you can close the frame by the remaining Tslot32con and the two M6x25cyl, but before fastening the second screw, insert the last M6nutplate into the outer slot of the Tslot32con.

Now you are done with the upper frame !



The lower frame

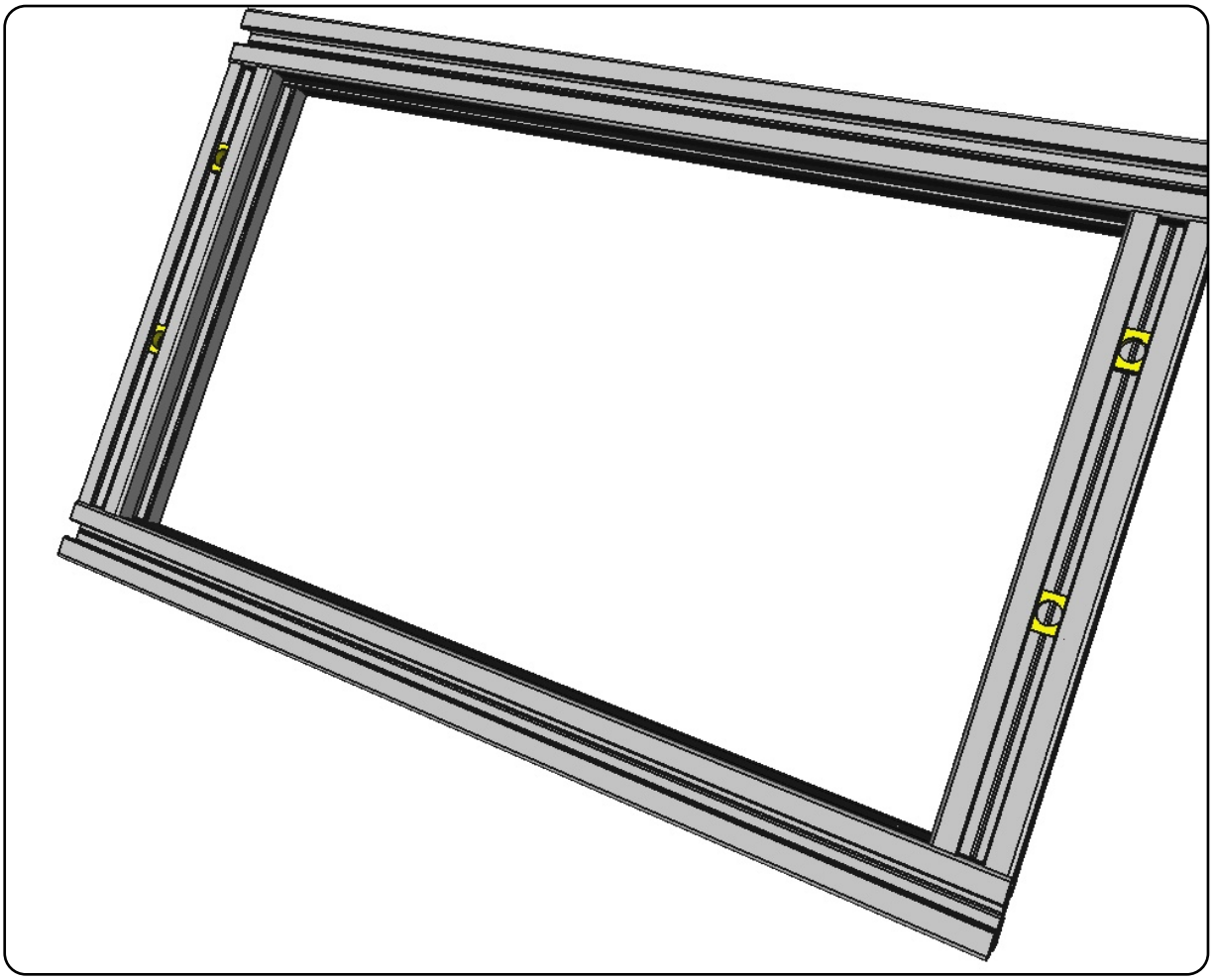
Step 5: The assembly of the lower frame is exactly the same procedure as for the upper frame, with one exception:



In Step2 and Step 4 you have to add four M6nutplates instead of only two.

Insert therefore two M6nutplates into the upper slot and one into the lower slot underneath and one into the outer slot as usual. Do the same with the other Tslot16 and apart from that repeat the Steps 1 to 4

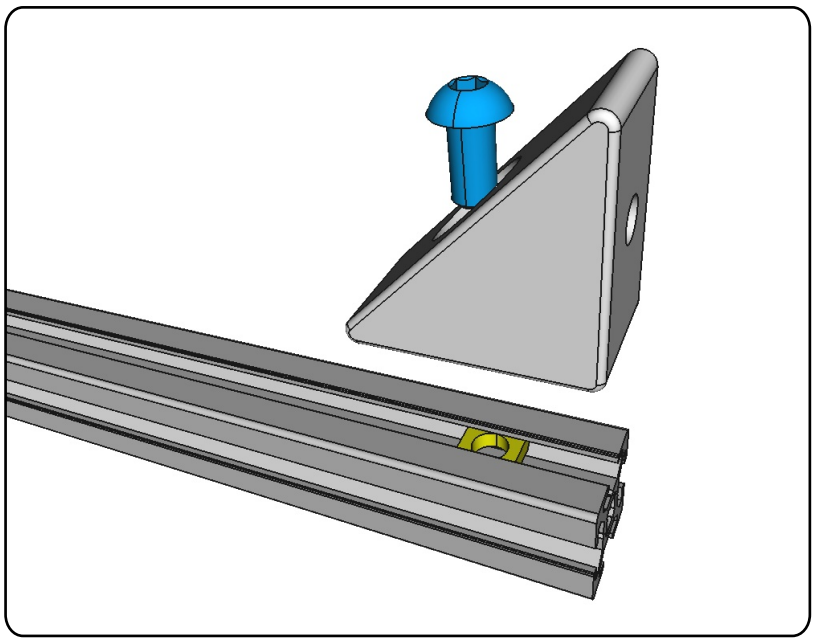
Now you are done with the lower frame !



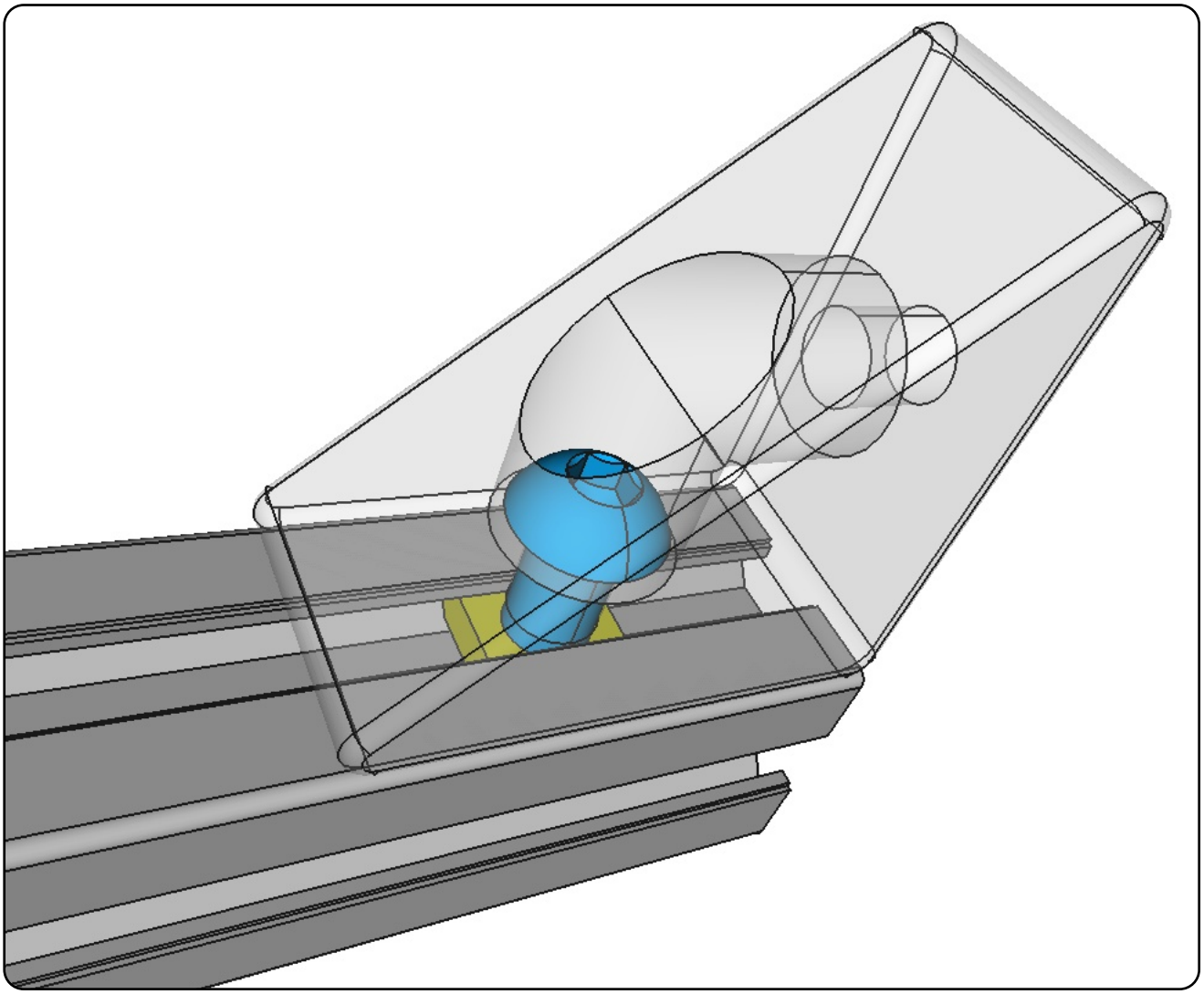
The upright pillars

Needed Parts:

4 x Tslot32
4 x RAconnector
8 x M6x12
16 x M6nutplate

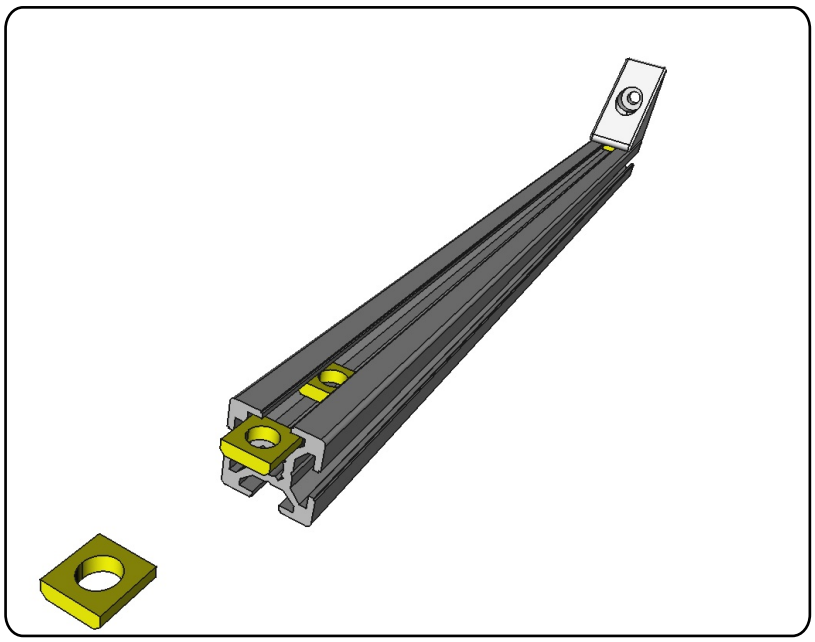


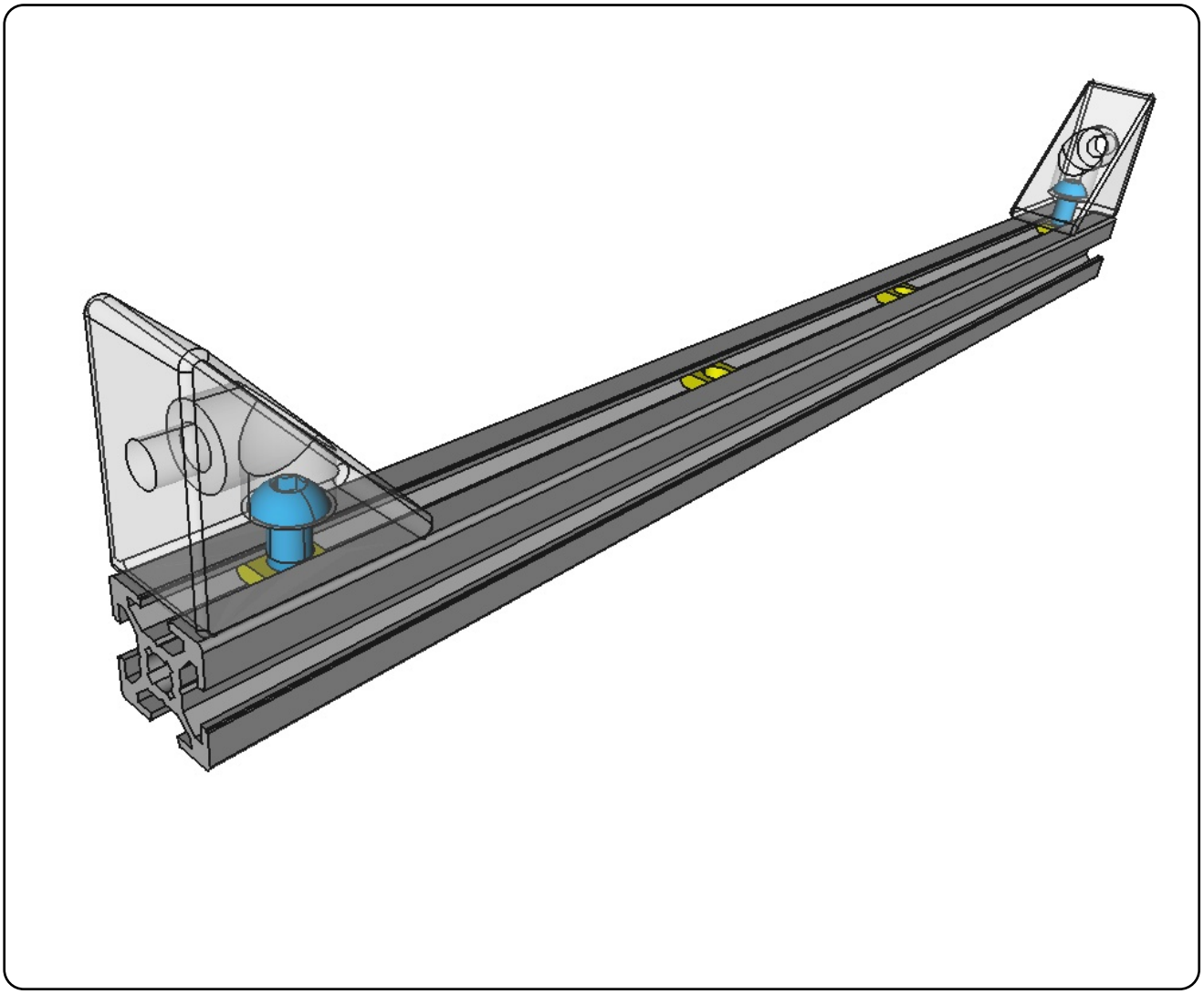
Step 6: Insert one M6nutplate at one end of a Tslot32-beam and use it to connect one of the RAconnectors to that beam with a M6x12 screw.



The upright pillars

Step 7: Insert three M6nutplates more at the other end of the beam and use one of it to connect another RAconnector there.





The upright pillars

Step 8: Produce three more of these prepared beams.

Now you are done with the upright pillars !