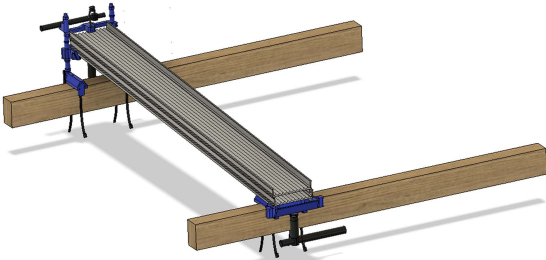




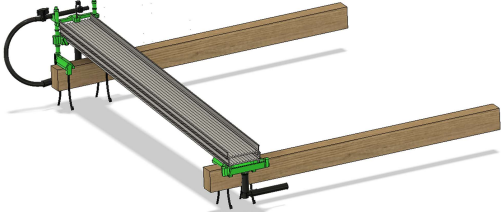
# QUICK NGU 2.0 installation guide

!This is a WIP instruction!  
Version 0.12 19-12-23

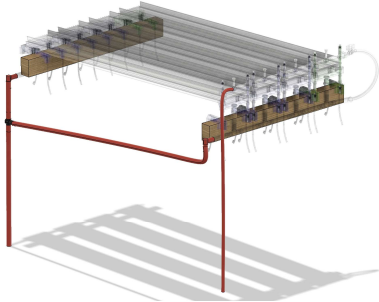
1. Expantionset



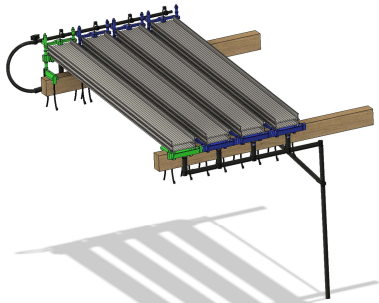
2. Startset



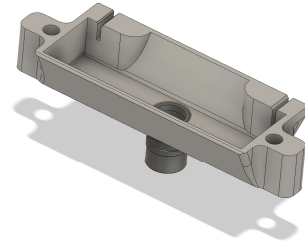
3. Endset



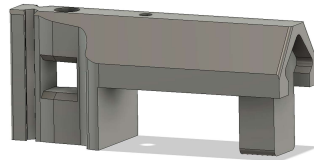
4. Testkit 2



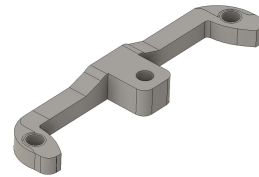
Watercollector 2.0



Beamholder + adjuster 2.0



Waterdistributer 2.0



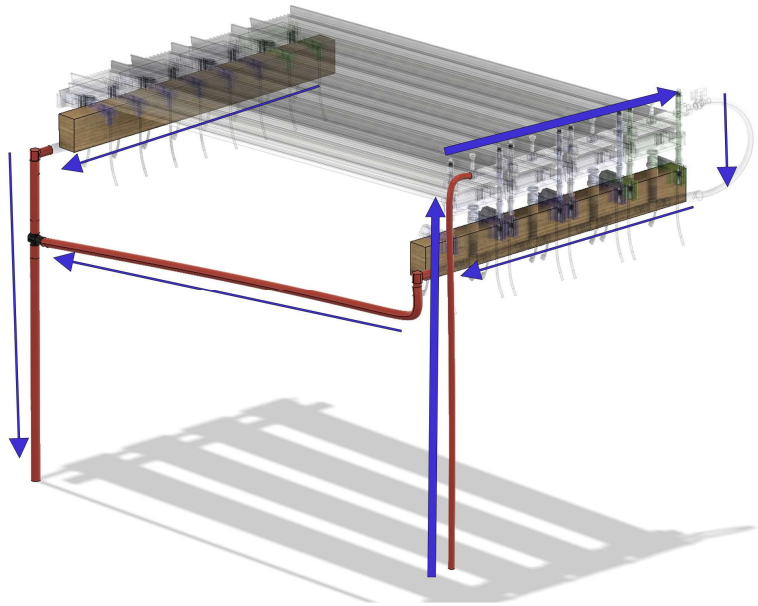
Pipeclipp 2.0



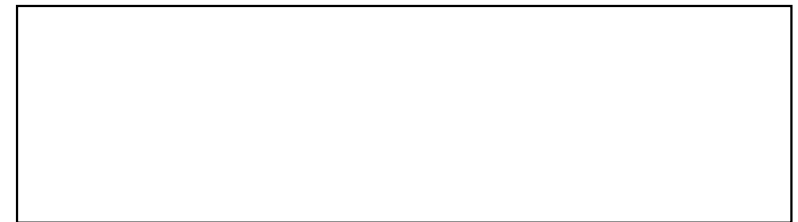
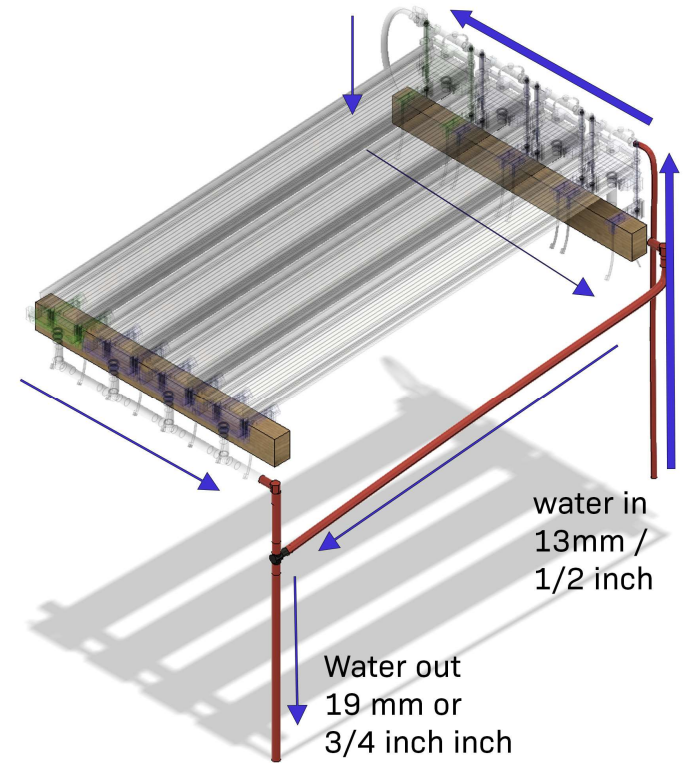
Round distance 1edge or 2edge 2.0



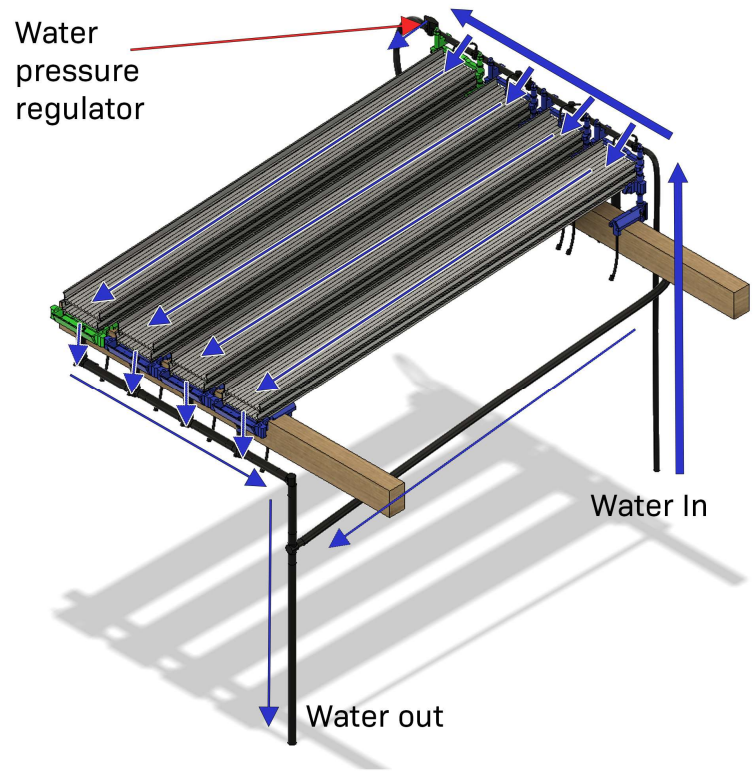
# How the water flows



The water flow according to the picture above.

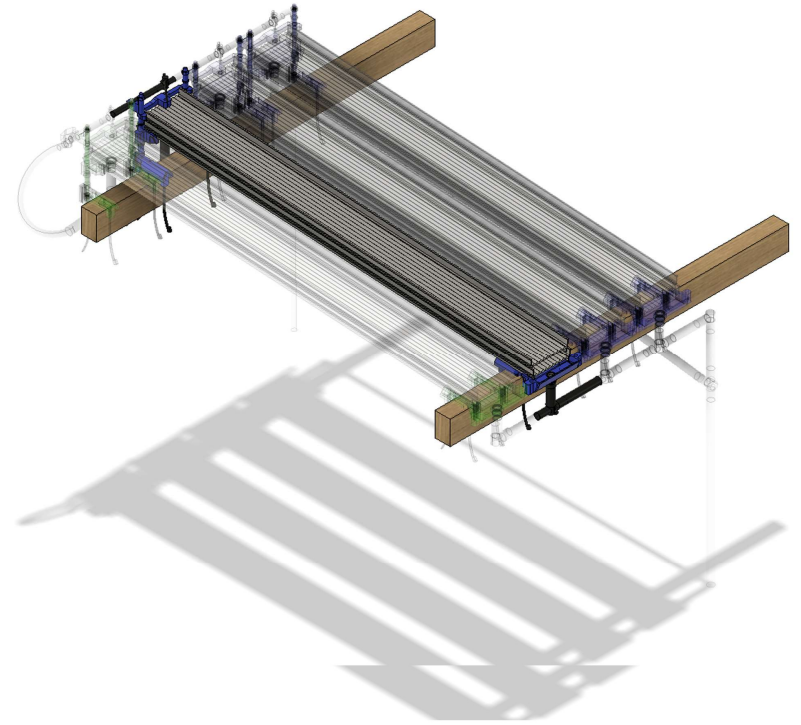
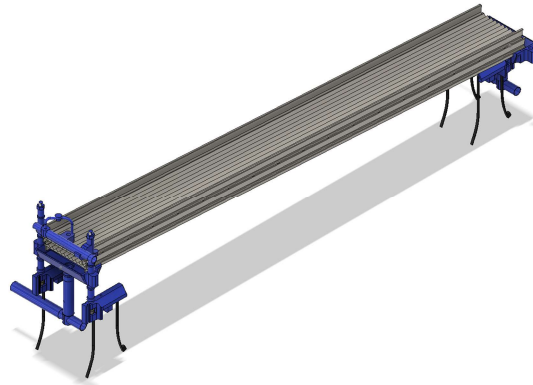
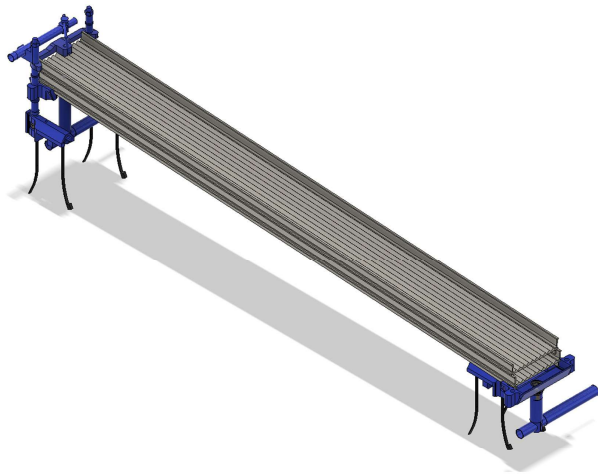




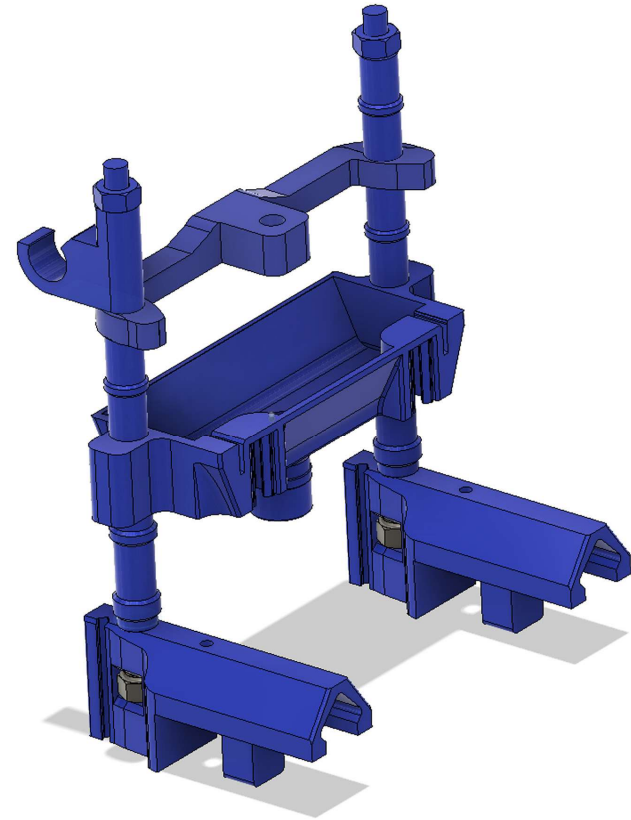


You want to aim for around 2 dl of water per channel and min.

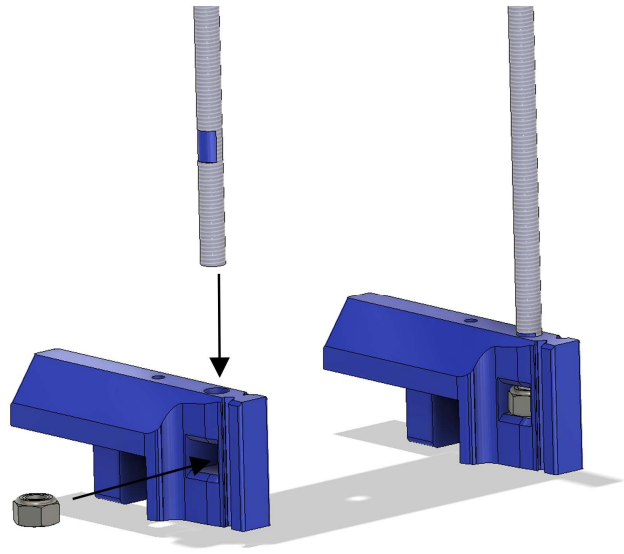
# Expansionset



We start with the backparts!



# 1



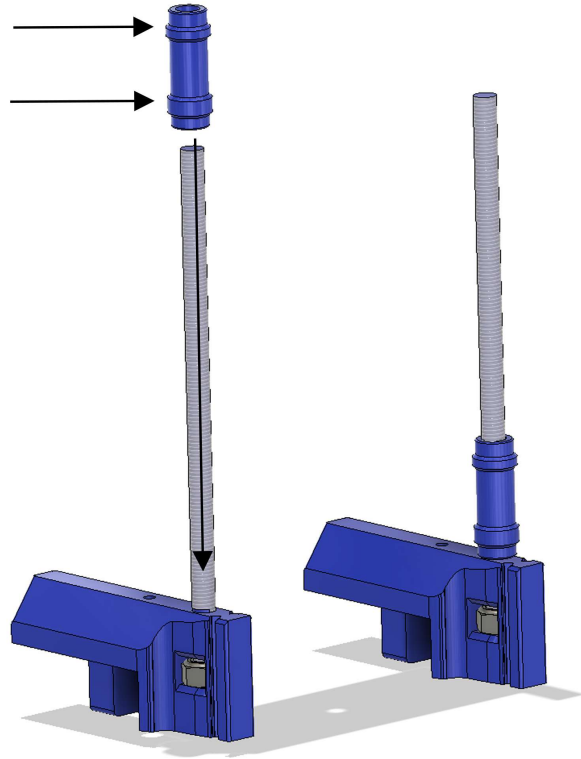
Start with getting the two locknuts inside each compartment, then screw the m8 metal rod until it's flush with bottom

# 2



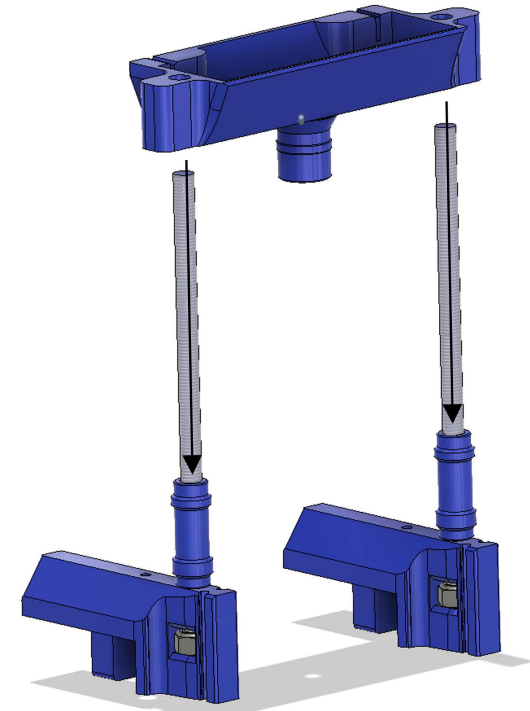
Prepare 2x

3



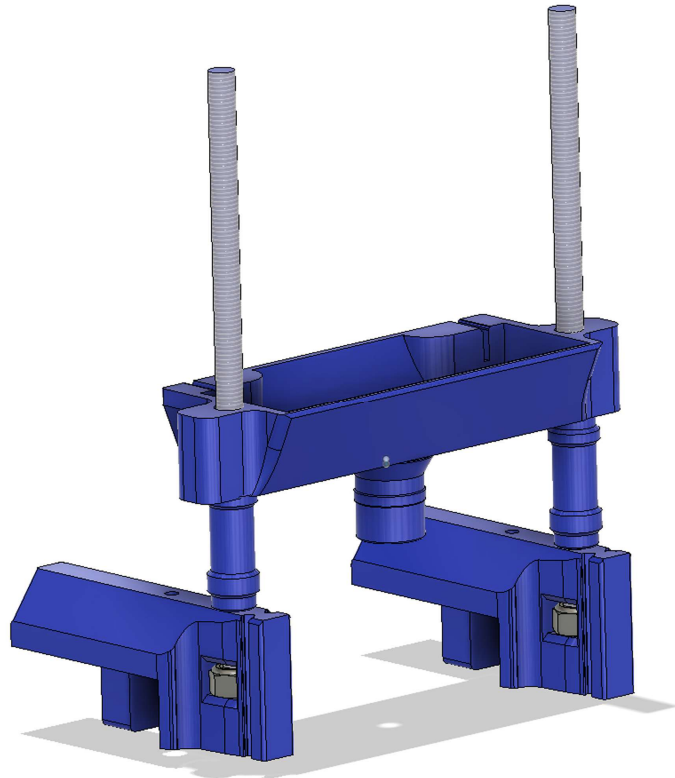
Add the round distances with 2 edges

4



Add the watercollector, make sure it's facing the correct way

5



6



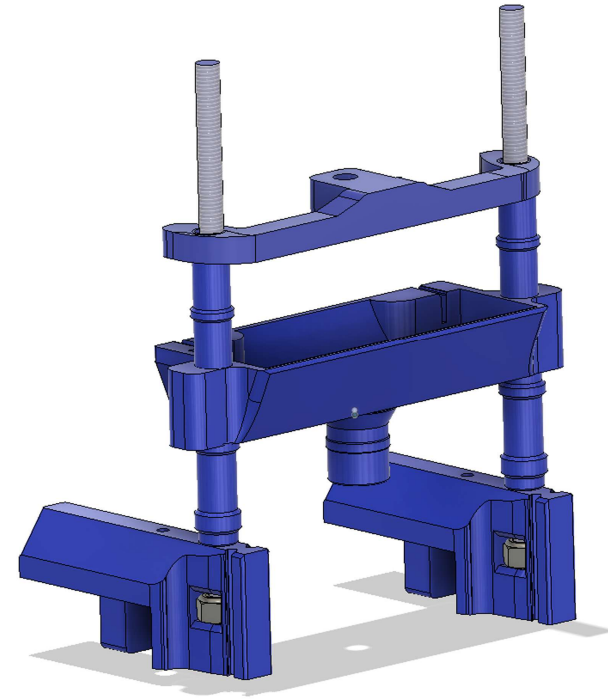
Add the two other rounded distances with 1 edge

7

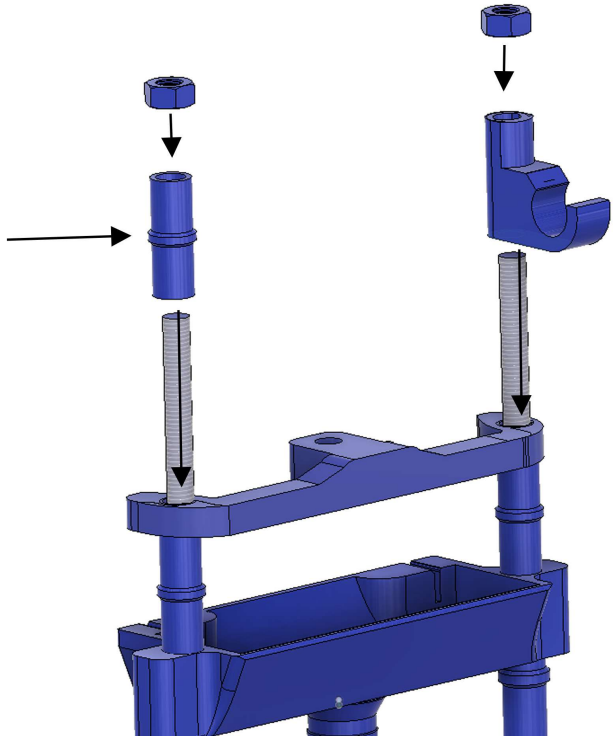


Add the waterdistributer also making sure it's facing the correct way.

8

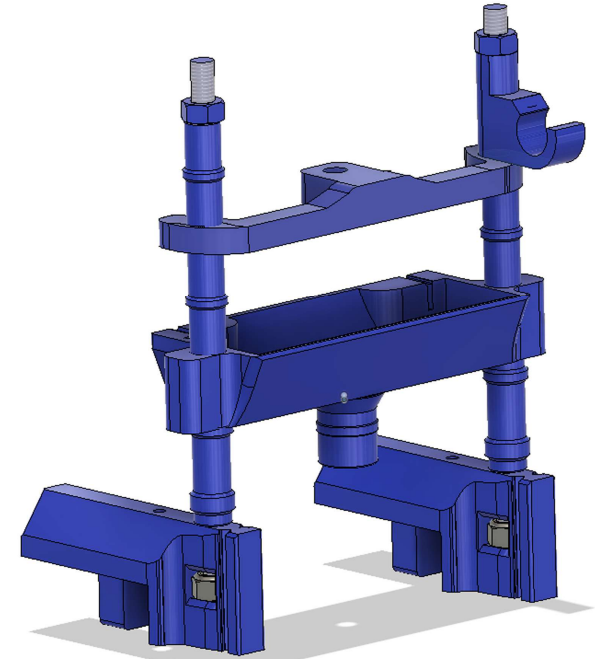


9



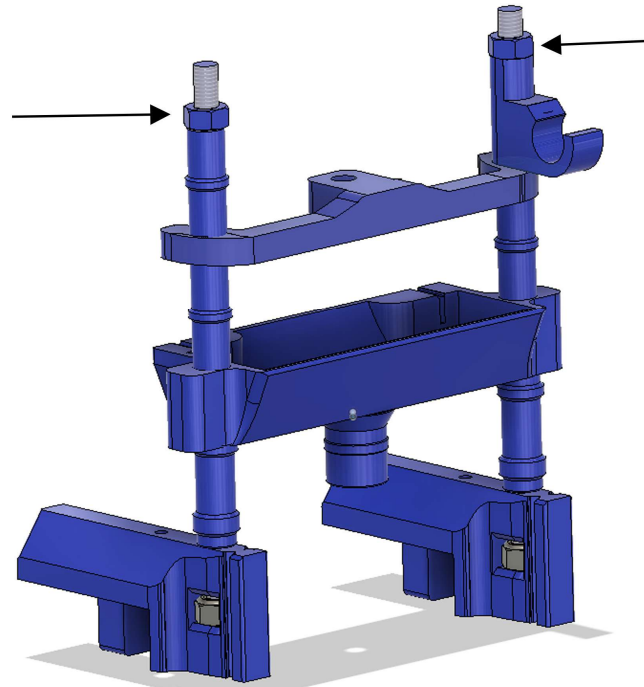
Add the last rounded distance with 1 edge and 1x pipeholder together with 2x M8 nuts

10



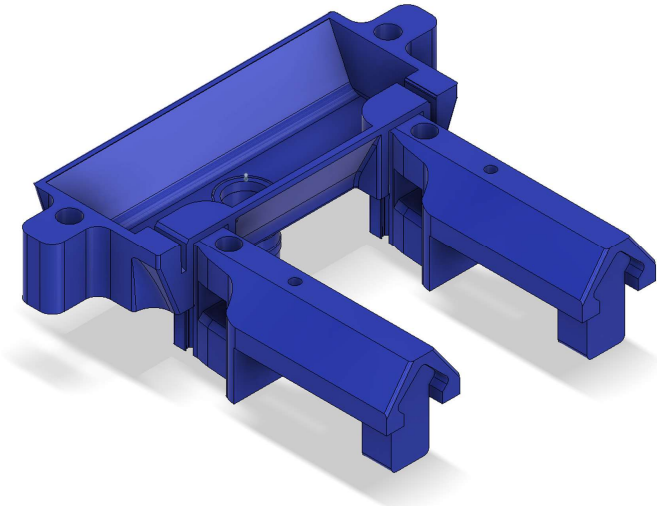


11



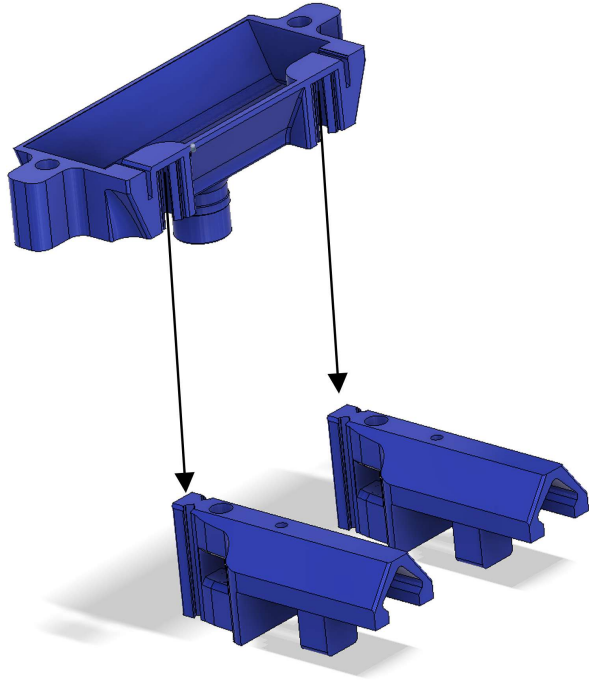
Tighten the screw until you feel the assembly keeps together.

1



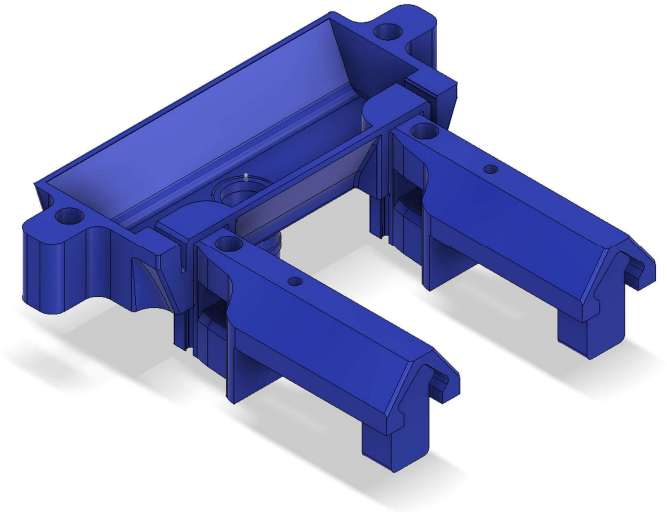
Front parts

# 2



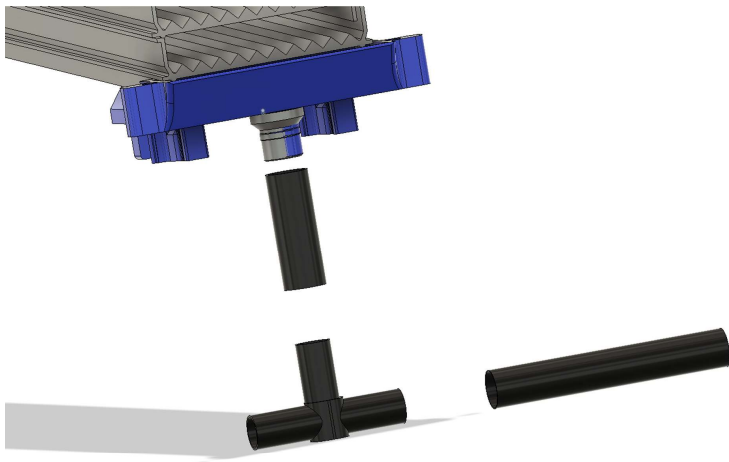
Add the watercollector and 2x  
Beamholders and connect them together.  
Use a rubber hammer to close fully if  
needed.

# 3



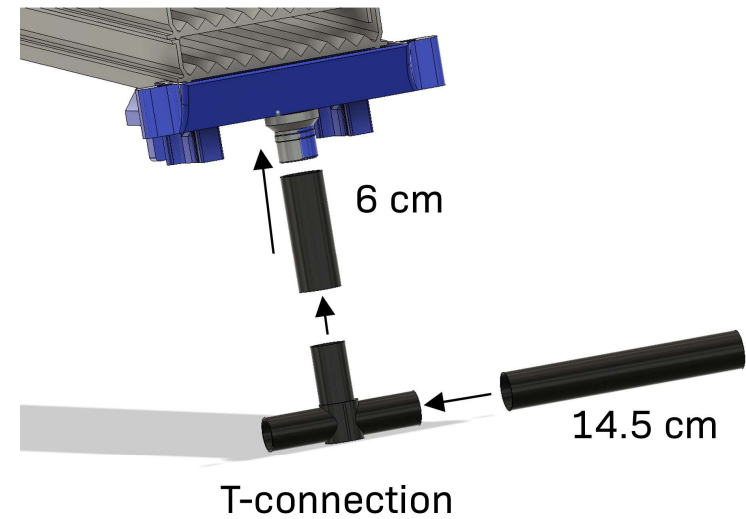
Pipes

# 1



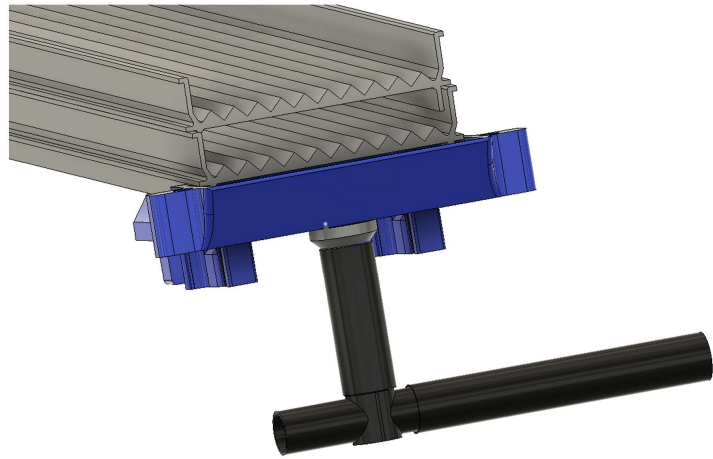
Pips front, 1x 6 cm, 1x T-coonnection and 1x 14,5 cm.

# 2

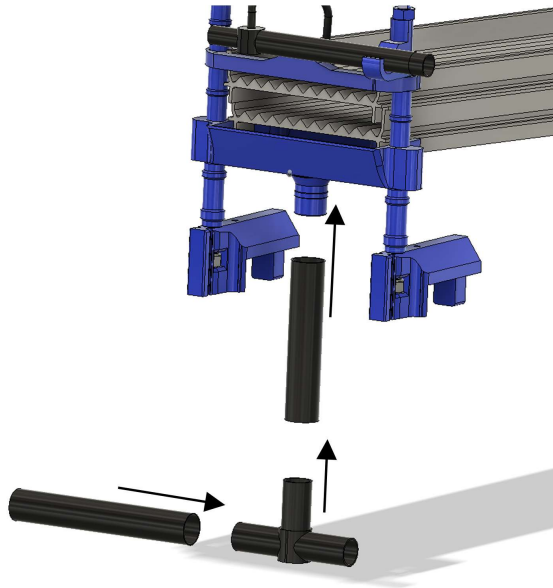


TIPS!  
Connect the pipes the last thing you do!

3

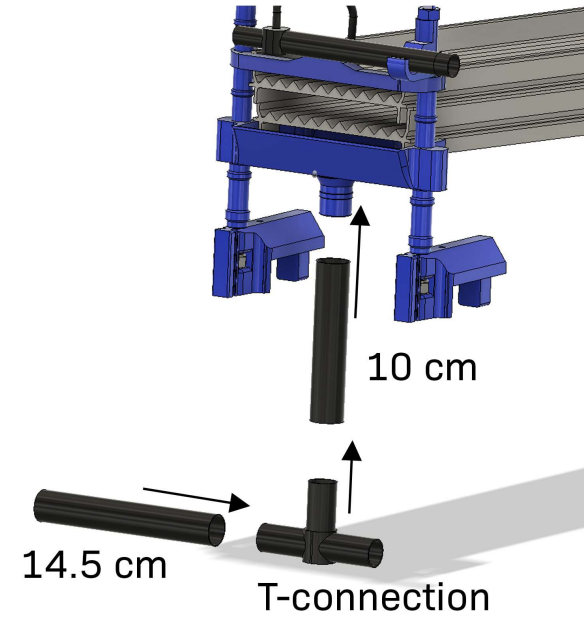


1

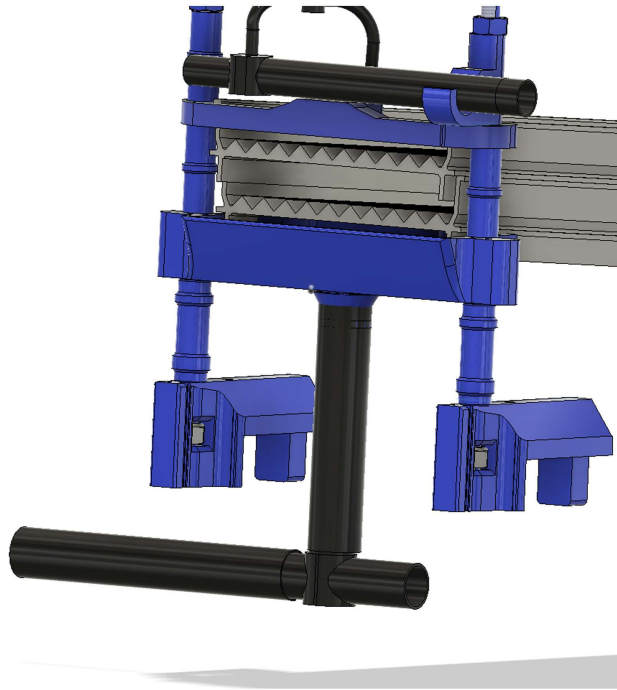


Pips front, 1x 10 cm, 1x T-coonnection and 1x 14,5 cm.

?



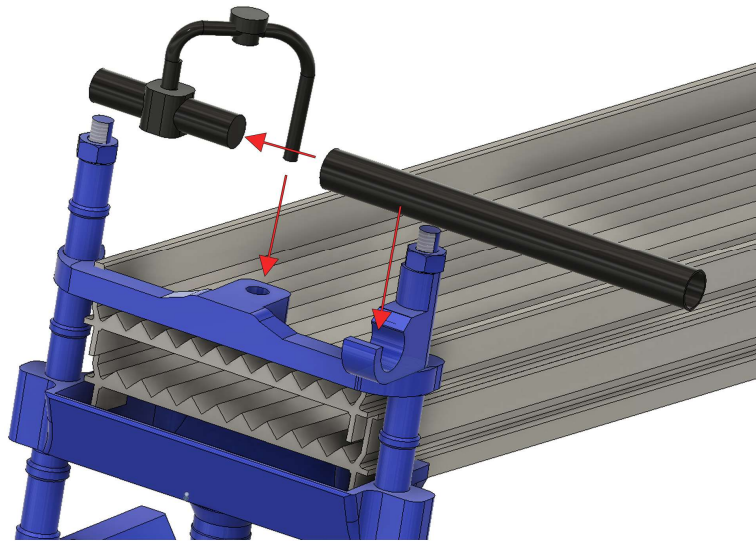
3



TIPS!  
Connect the pipes the last thing you do!

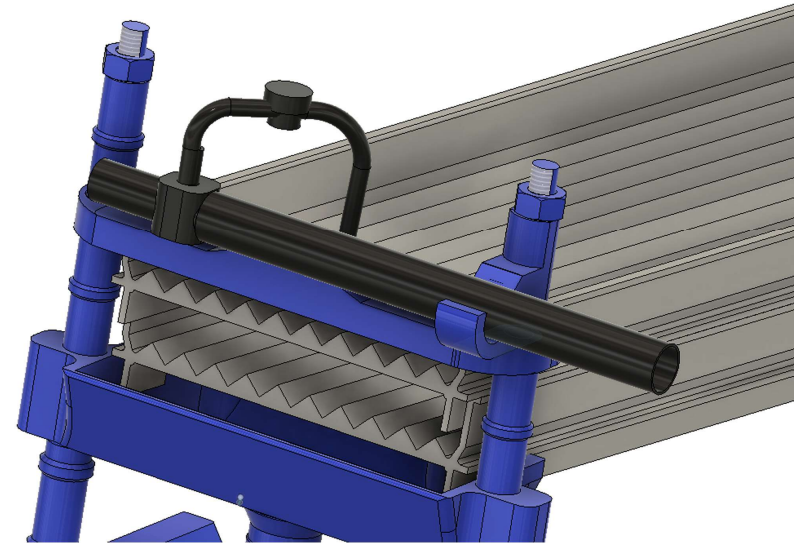


1



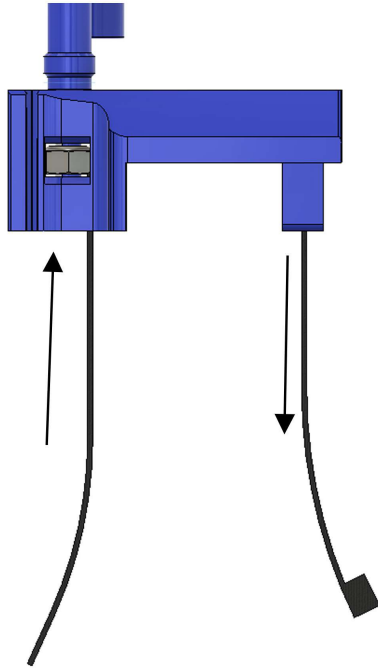
Make sure the 13mm tube goes all the way inside the connector.

2



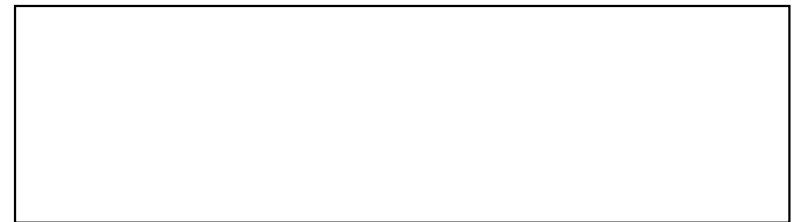
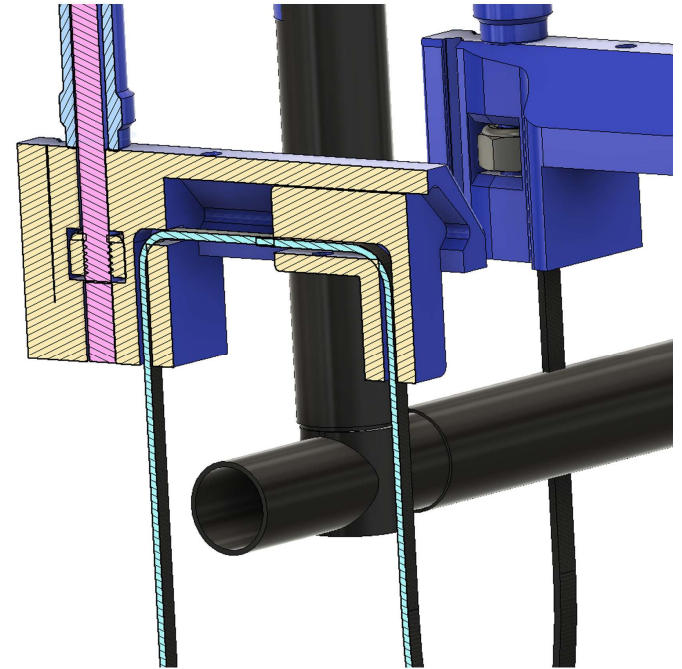
TIPS!  
Connect the pipes the last thing you do!

1

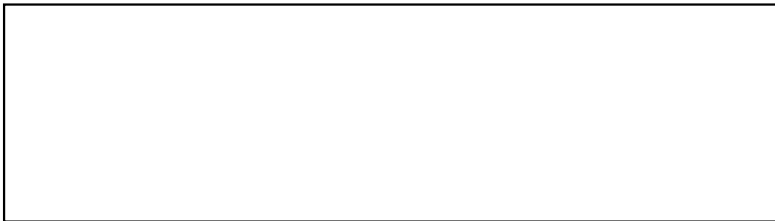
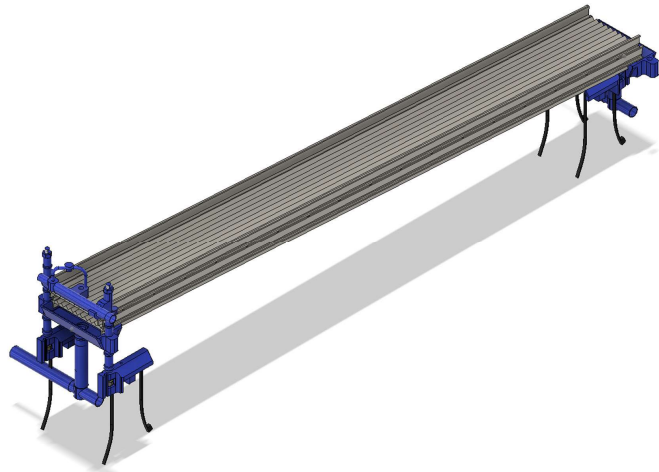


Add the cable ties to the beamholders, if you having trouble add more length to the adjuster

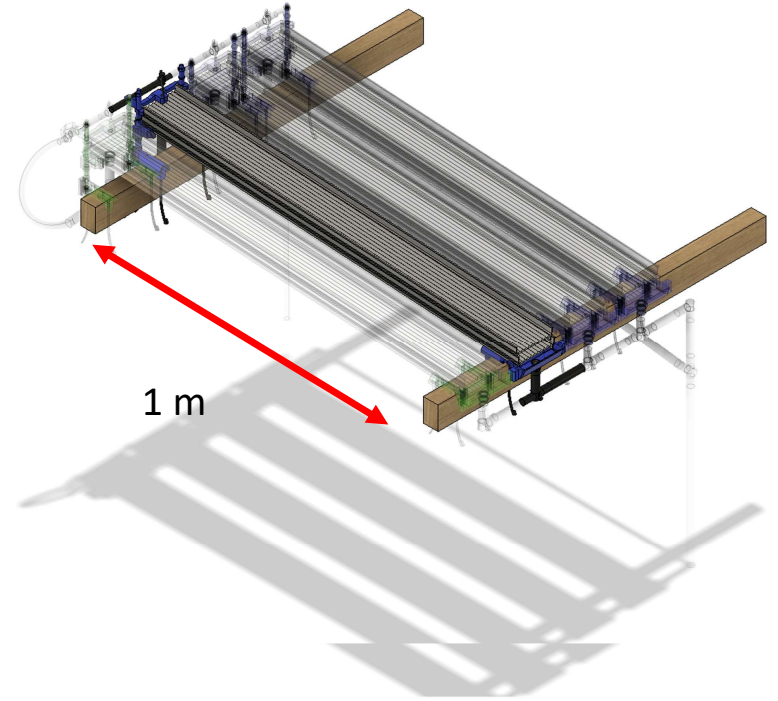
2



3

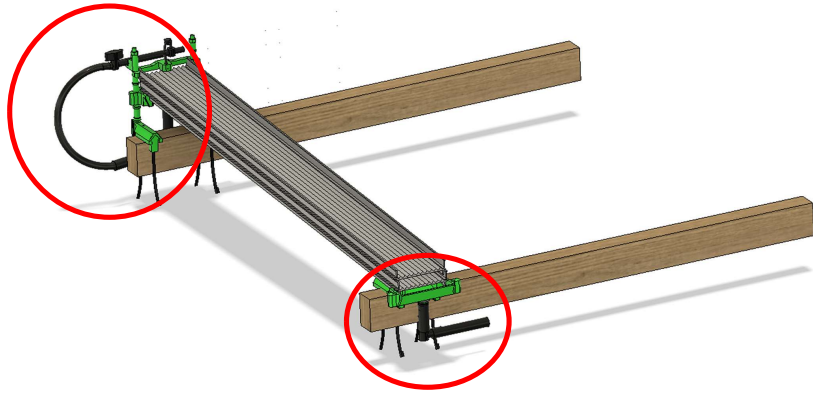


4



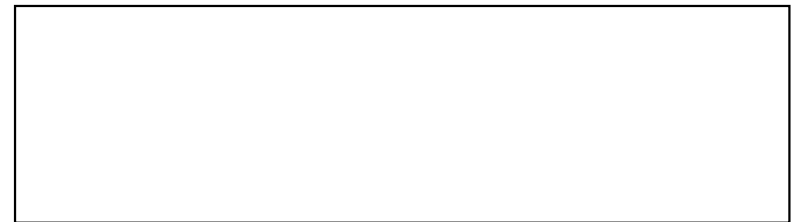
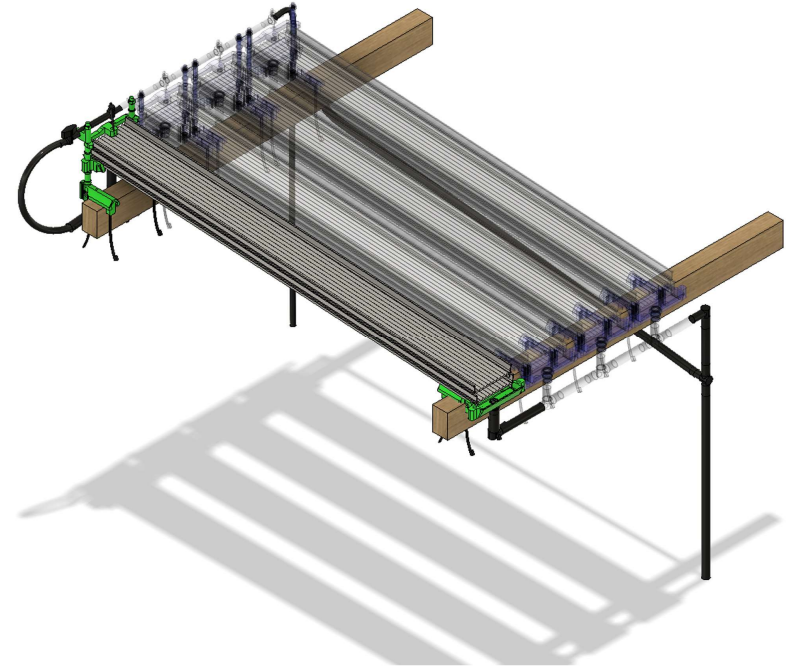
Recommended length is 1 m between the supports. The width of the support can be between 2 cm and 7 cm thanks to the adjuster on the beamholder

# 1

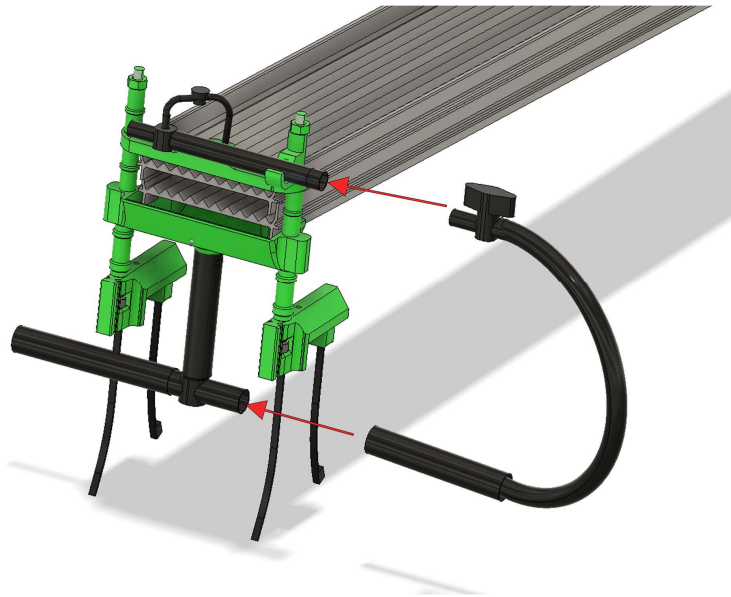


Startset – The setup is the same as the expansion set the only difference is the pressure regulator on the backside and the L-connection on the front

# 2

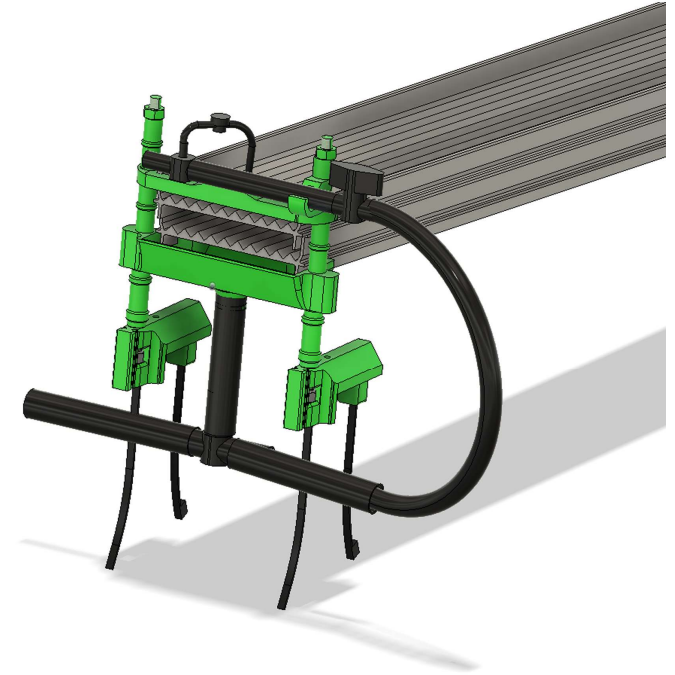


1



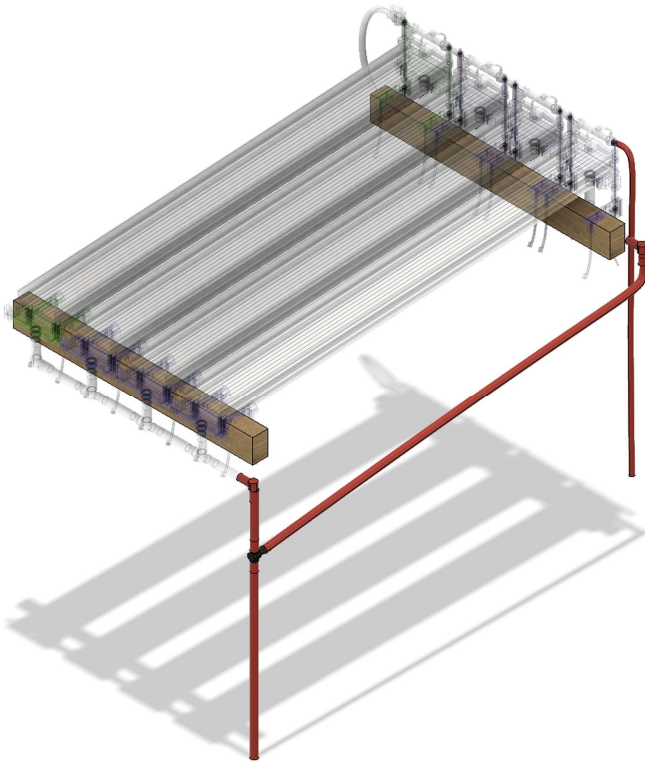
The hose with the pressure regulator is premade.

2



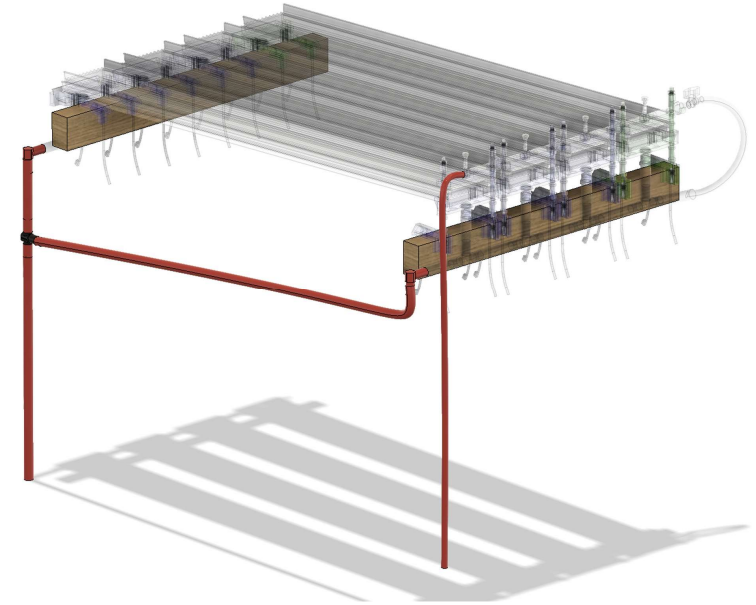
The pressure regulator helps you with controlling the outflow of water to each channel.

# 1



The endset is an optional set, it consists of 2x L-connections and 1x T-connection and a few pipes.

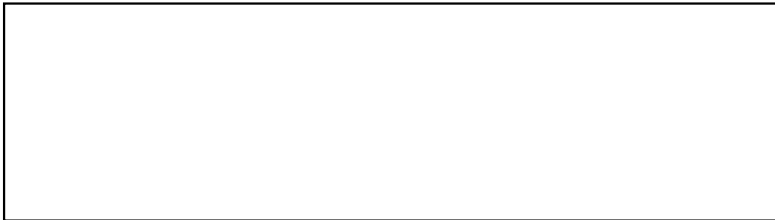
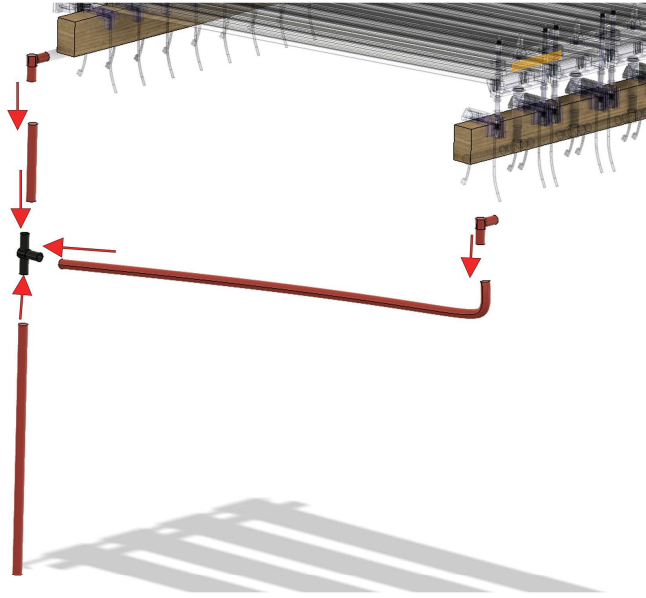
# 2



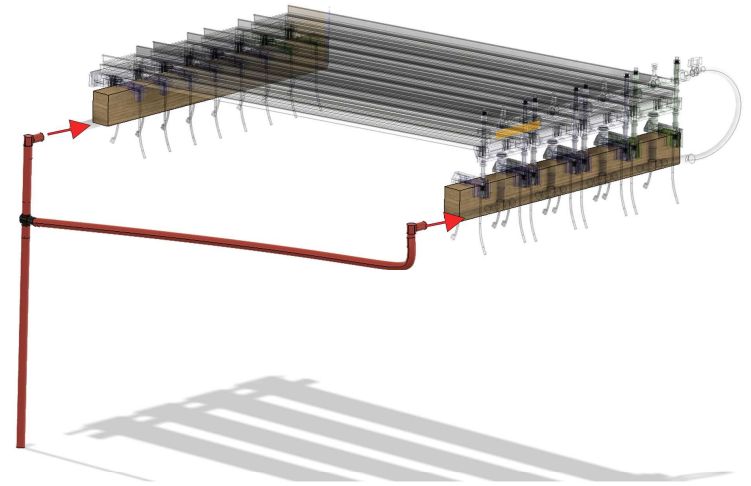
The endsets primary function is to lead away all the excess water from the system. You can use standard  $\frac{3}{4}$  inch or  $\frac{1}{2}$  inch tubing (19mm or 13mm)



1

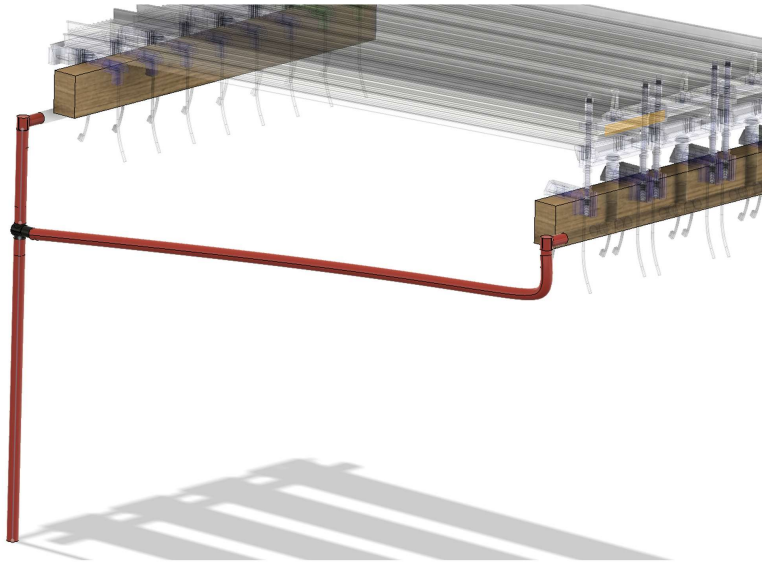


2



The outlets connects using thier L-connections to the expantionssets 19mm or  $\frac{3}{4}$  inch tubing.

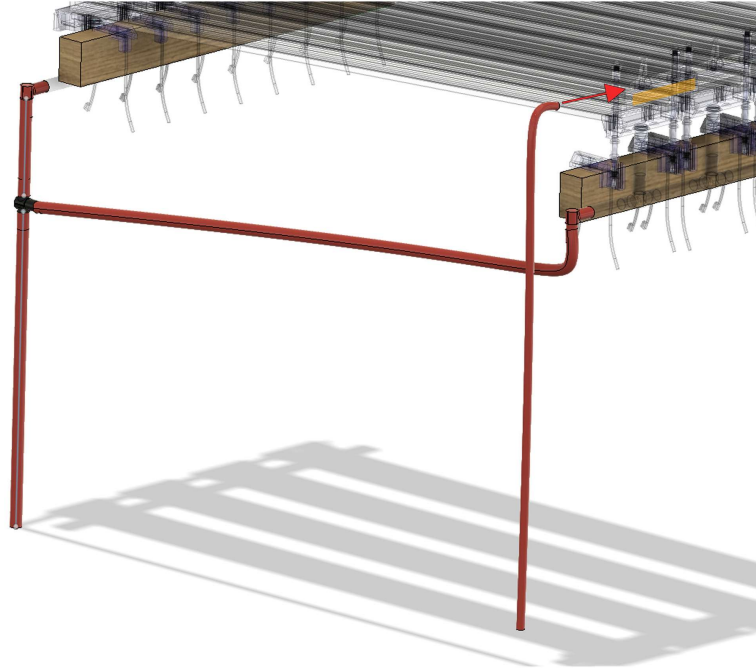
1



Lead the water to a drainage tank or a floor drain

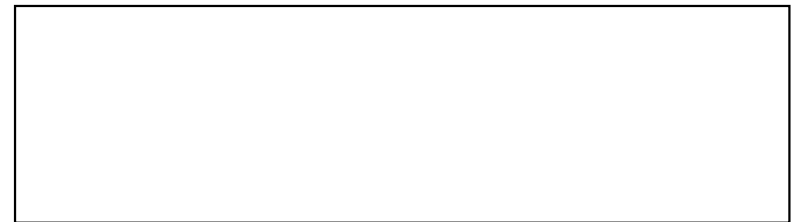
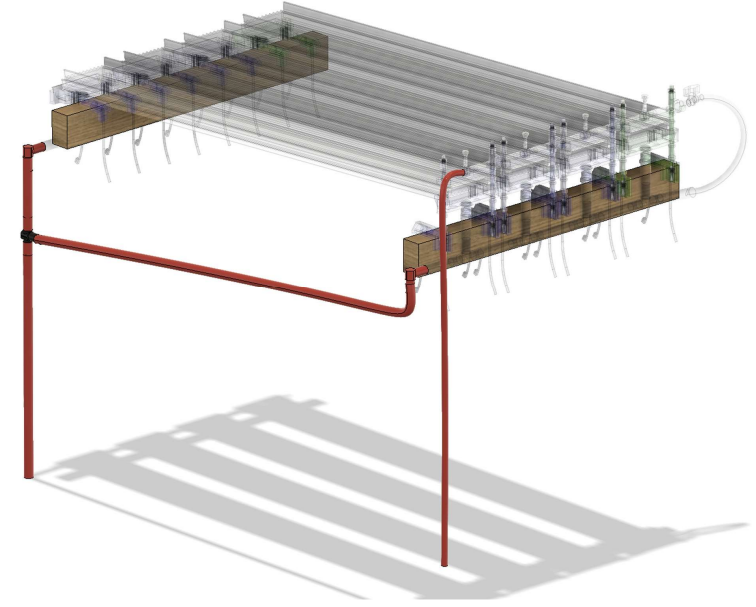


1

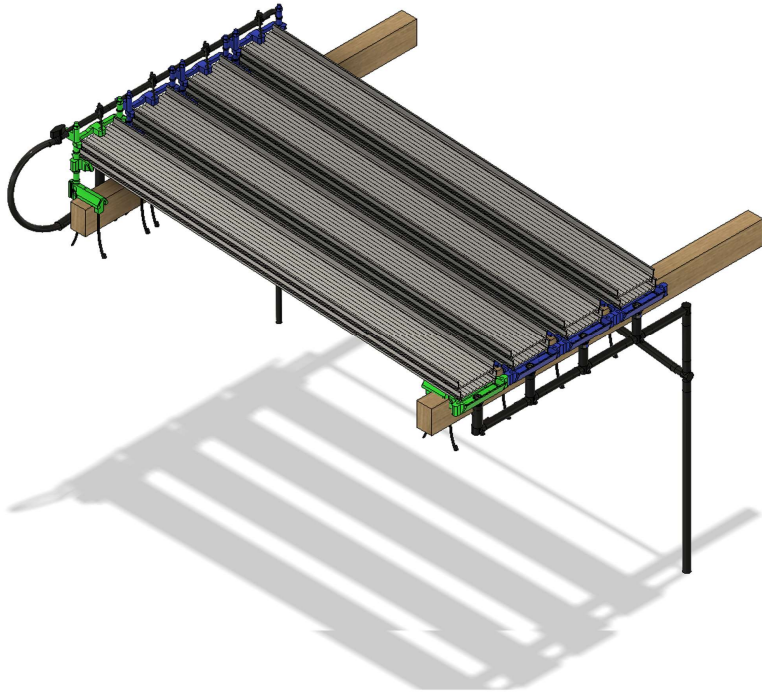


Connect the 13mm or ½ inch tubing to the hardpipe. This is the water intake, connect it to a pump or directly to the water outlet.

2

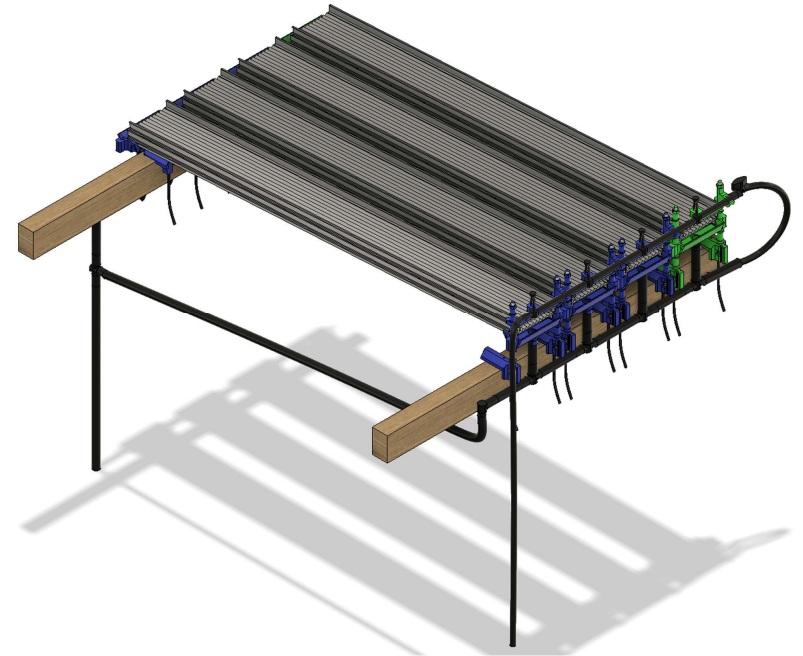


1



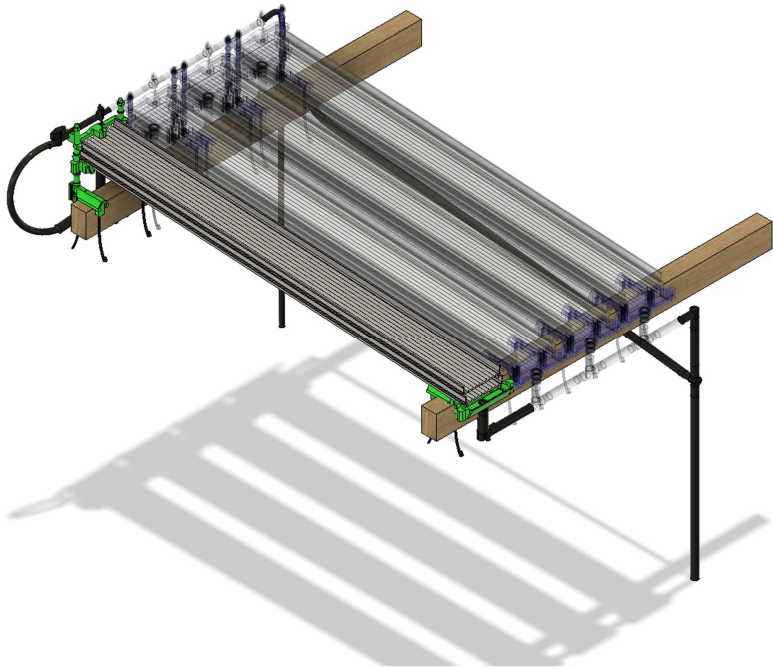
For testkit 4, start with the startset (green) then add the expansionsets (blue) make sure the watercollectors touch each other.

2



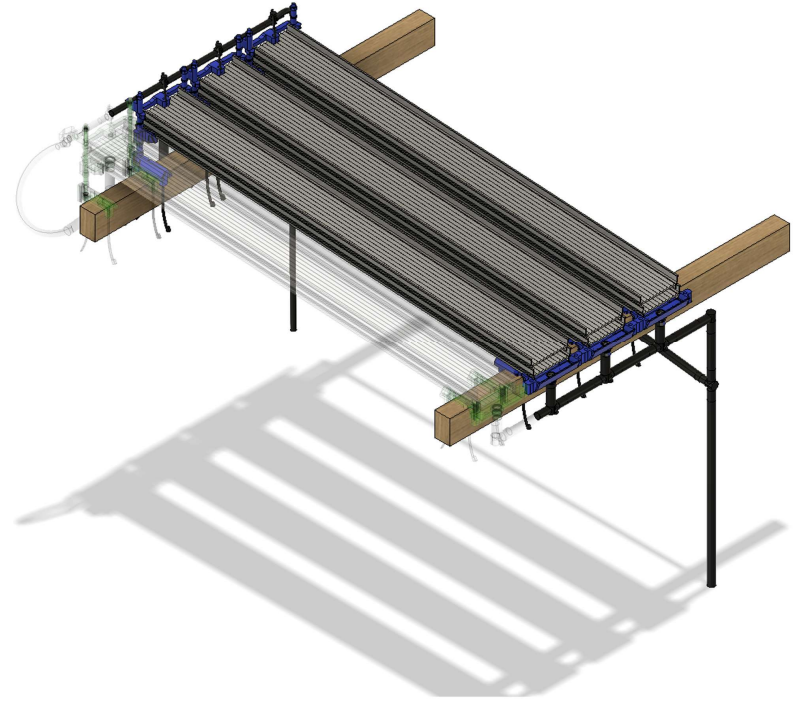
Finally add the endset and connect it to a circulation pump

1

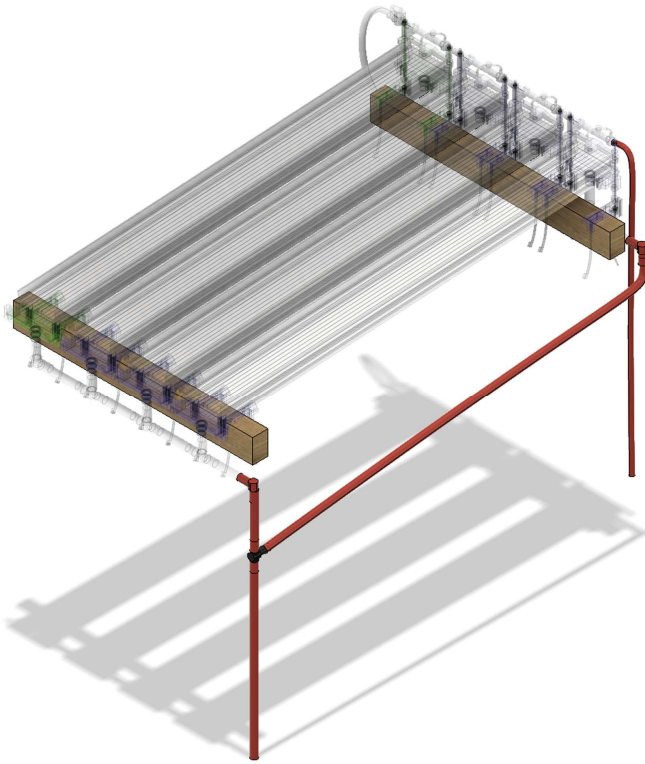


Startset (green) the rest of the expansionsets then builds next to it.

2

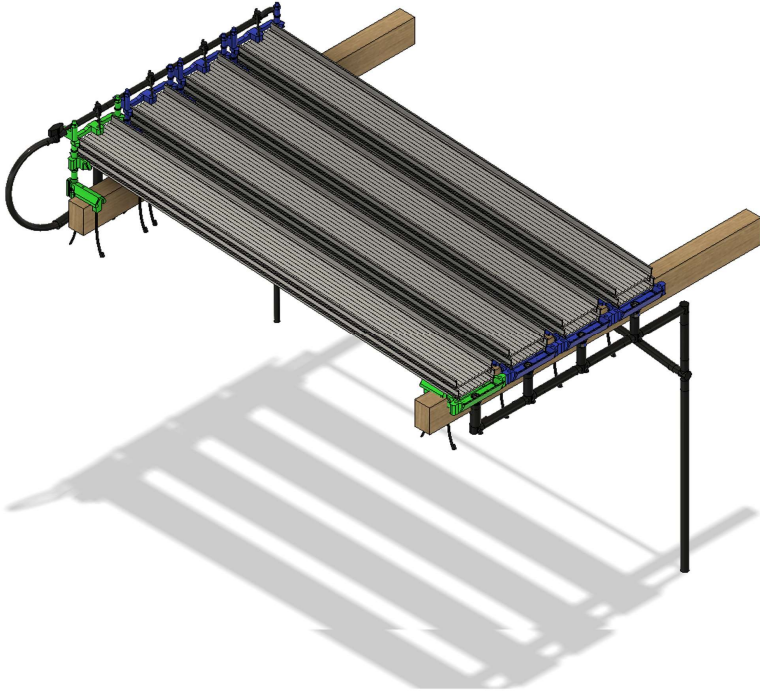


# 1

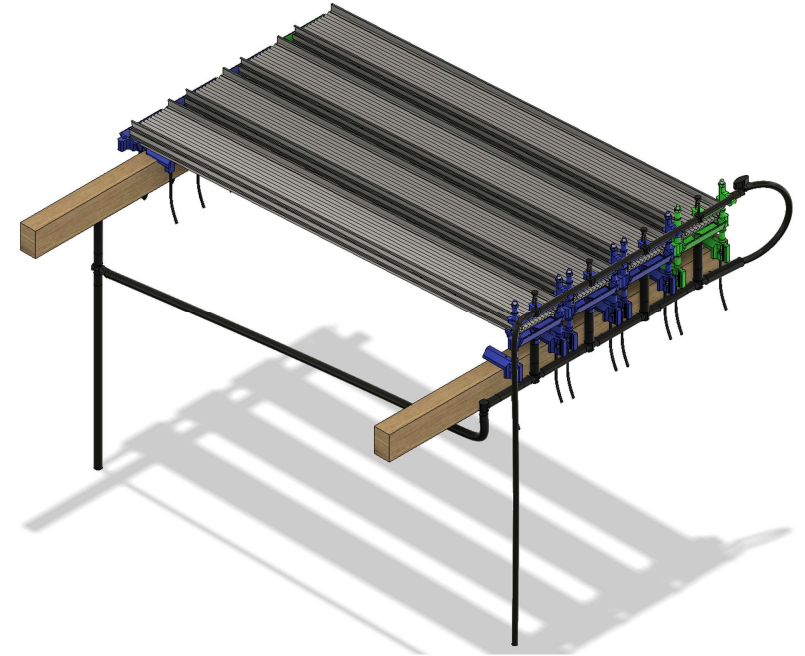


Adding more than 14x expansionsets you might need to upgrade your waterdraining from 19 cm or  $\frac{3}{4}$  inch to something between 30-40 cm pipes.

# Watering tips



Watering should be around 1-2 min 3-4 times a day. It's better to do many smaller waterings than few larger waterings. The aim is to reach around 2 dl per min. Adjust the pressure regulator to achieve this.



We recommend a run to waste system, which means you use clean water everytime and discard the old. Only water is needed!



# Cheap, simple automation recommendation



Use water directly from tap and connect to it to the smart controller. Then program it to the mechanical water distributor that works with pressure. When the pressure stops the mechanical water changes outlet so only 1 outlet is active. This works well if you have multiple levels.

<https://www.gardena.com/int/products/watering/water-controls/smart-water-control-set/967048901.html>

<https://www.gardena.com/int/products/watering/water-controls/water-distributor-automatic/966749301.html>

