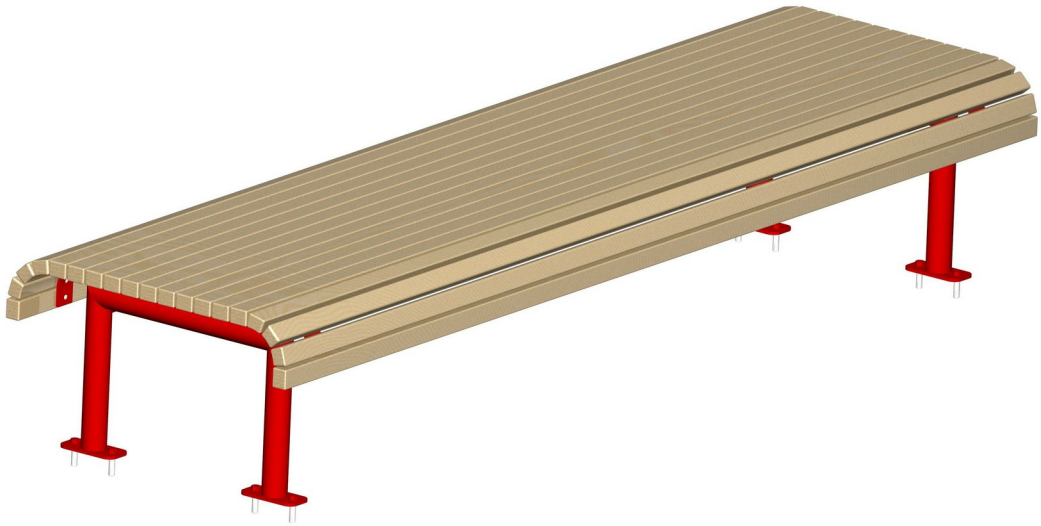
Simple park bench plan

Park bench is one of the most frequent piece of outdoor furniture and it existed since ancient times, but back then cultures like Greeks and Persians made massive garden benches out of the different kinds of stones. Somewhere in the 18th century craftsmen began to make park benches out of wood and metal and this kind of outdoor benches are familiar in the whole / entire world today. Park benches serve to give people comfortable seating anywhere they can be installed. Most often we find them in parks, in places with nice views, on nearby sidewalks,recreational areas, play areas, running and cycling trails, at bus stops/malls, in front of public institutions or other attractive places where they can be of practical use.

Mostly, these are spaces with crowds of people circulating, so the need for a resting place is absolutely normal; without park benches, these spaces would be highly impractical. Park benches are most commonly used by elderly people, mothers with small children, couples in love, people who need a little rest or some quick take-away meal, etc.



There is a large number of construction types of park benches, and here we have decided to make a plan for a very simple, non-leaning metal bench, whose construction is made of welded tubes and the seat is made of wooden slats. It has a simple construction and is very durable - with proper maintenance, it will last for decades.

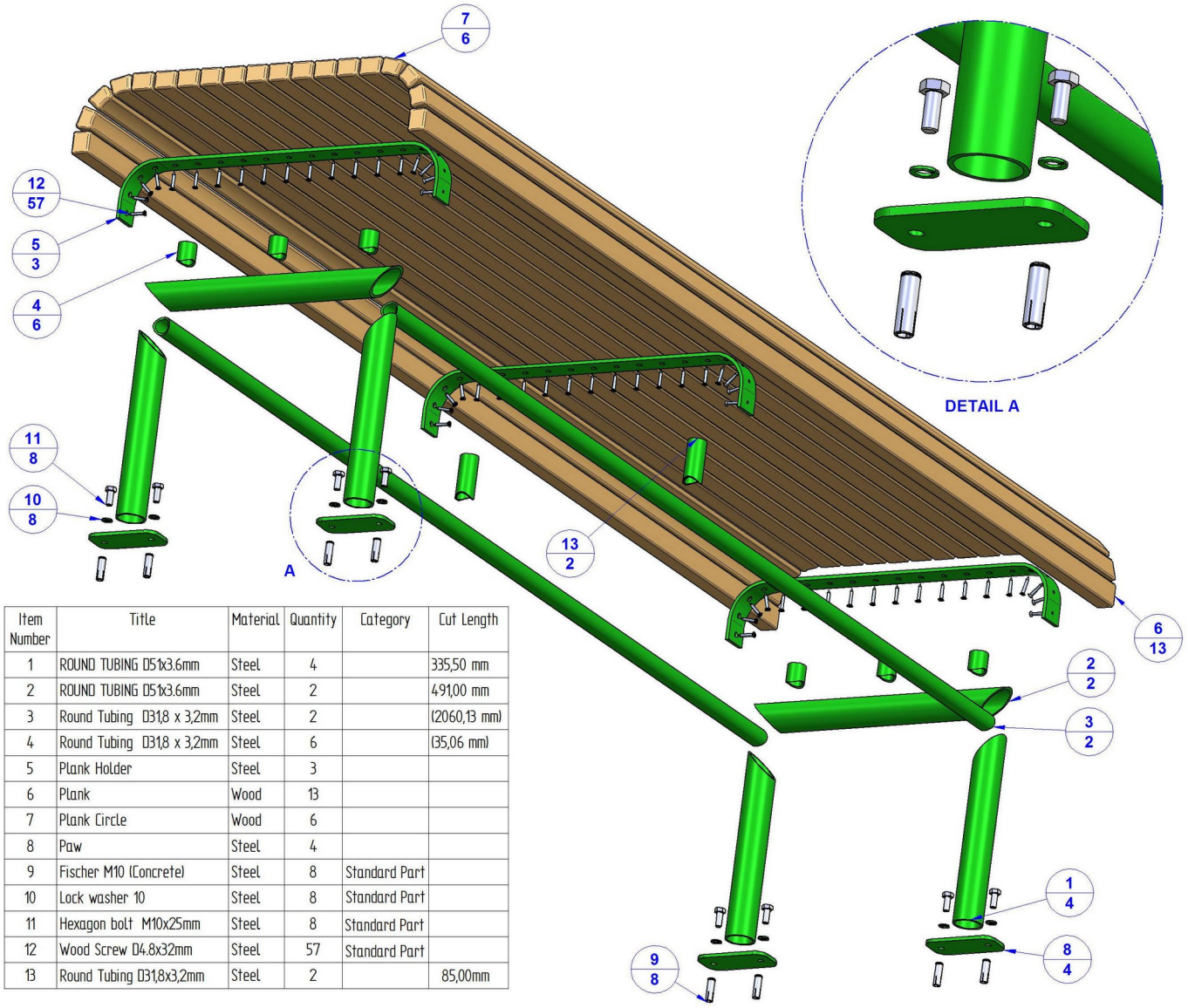
Actually, you don't need too many skills to build this park bench: some basic knowledge of woodworking and wood protection, basic knowledge of metalworking (cutting, bending and welding) and wood surface protection, and knowledge on how to install a park bench. Yes, this is all that is required! All you need to do is to cut the metal pipes to the required length and shape, weld them together and fasten wooden laths wih screws to the welded structure. To make the bench last long, all the wooden and metal parts need to be protected against environmental influences.

The park bench in our plan is customized to surface mount system. With minor changes, however, you can easily customize it to be portable or installed by using in-ground mount system.

The plan contains drawings of the parts and assembly with all the necessary dimensions, on the basis of which you can easily make this park bench. If you need different dimensions, however, the bench construction can be easily customized. Also, if you do not have tubes of the same diameter as we have suggested, feel free to use a diameter that is right for you or that you have in your workshop. Of course, it mustn't be too small, as the bench would lose its sturdiness. This equally applies to a much bigger diameter, which would make the bench look 'inharmonious'.

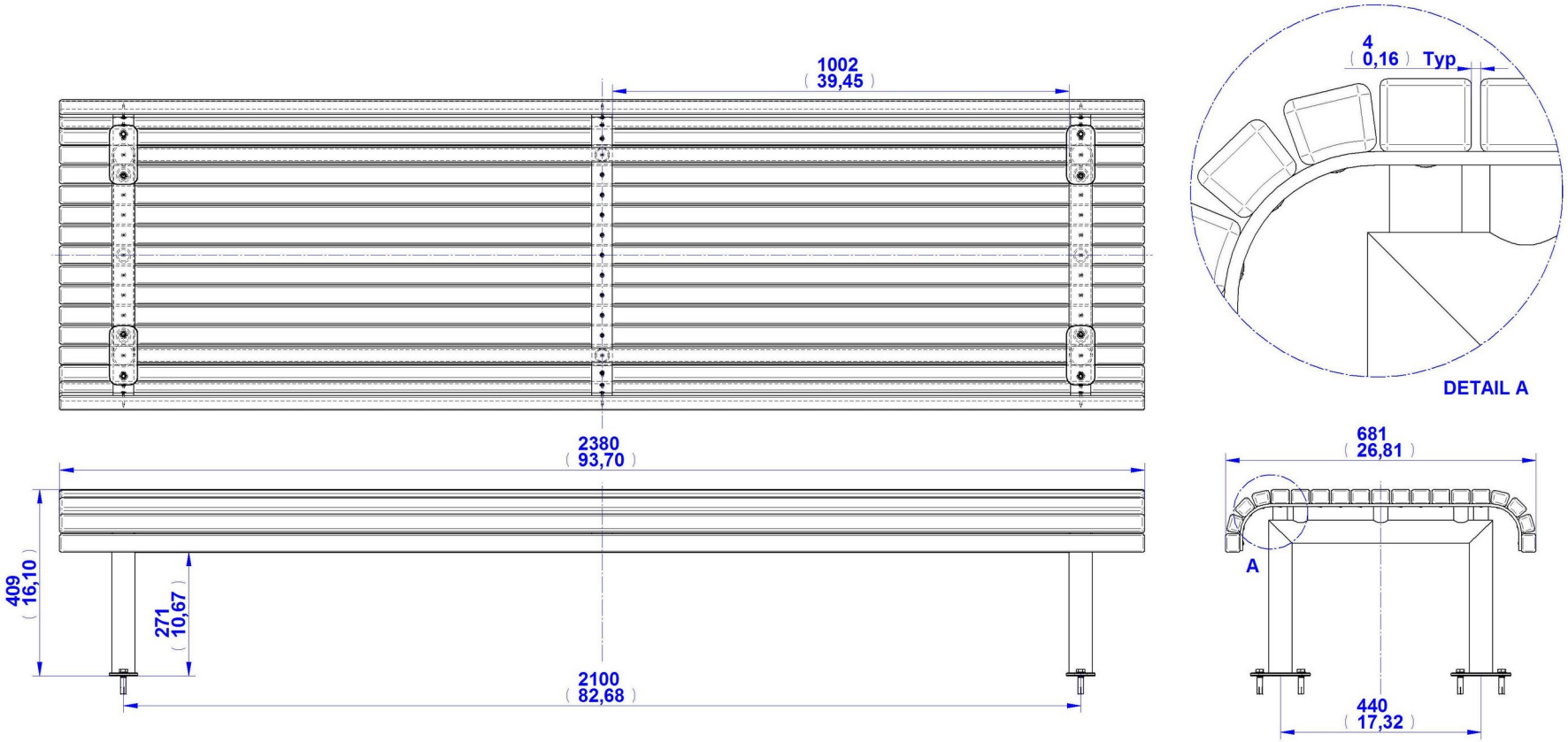
The bench legs (Part 1 and Part 2) and the rail can be made from one piece of tubing, but then a tube of a rather large diameter has to be bent. The bending can be avoided by welding an standard elbow of the same diameter between the leg and the rail (in which case you will have to buy an elbow, won't you?). In the plan, however, we have decided on the third variant: to cut the legs and rail at 45 degrees and weld. This is the simplest variant, especially since the leg-rail connection is not visible anyway since it is covered by the seat.

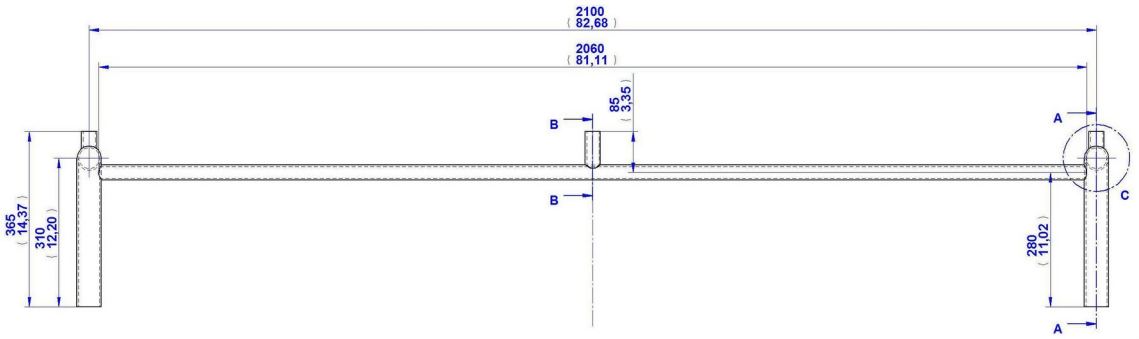
PARTS LIST

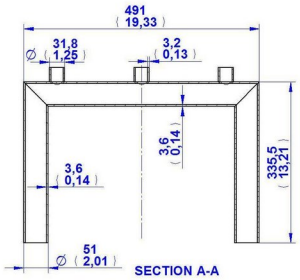


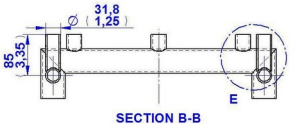
Item Number	Title	Material	Quantity	Category	Cut Length
1	ROUND TUBING D51x3.6mm	Steel	4		335,50 mm
2	ROUND TUBING D51x3.6mm	Steel	2		491,00 mm
3	Round Tubing D31,8 x 3,2mm	Steel	2		(2060,13 mm)
4	Round Tubing D31,8 x 3,2mm	Steel	6		(35,06 mm)
5	Plank Holder	Steel	3		
6	Plank	Wood	13		
7	Plank Circle	Wood	6		
8	Paw	Steel	4		
9	Fischer M10 (Concrete)	Steel	8	Standard Part	
10	Lock washer 10	Steel	8	Standard Part	
11	Hexagon bolt M10x25mm	Steel	8	Standard Part	
12	Wood Screw D4.8x32mm	Steel	57	Standard Part	
13	Round Tubing D31,8x3,2mm	Steel	2		85,00mm

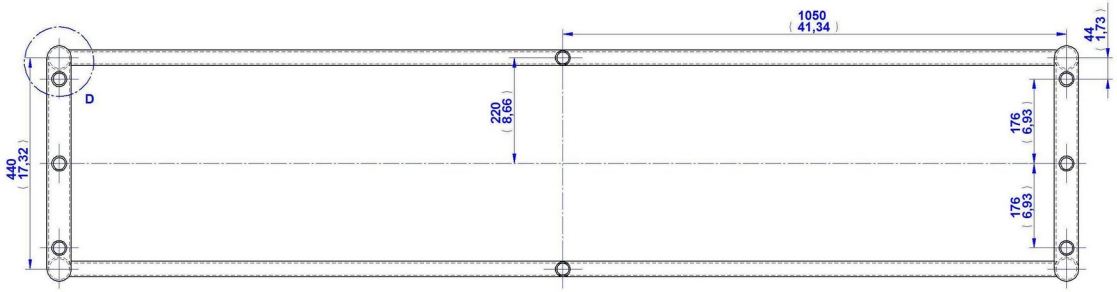
2D Documentation

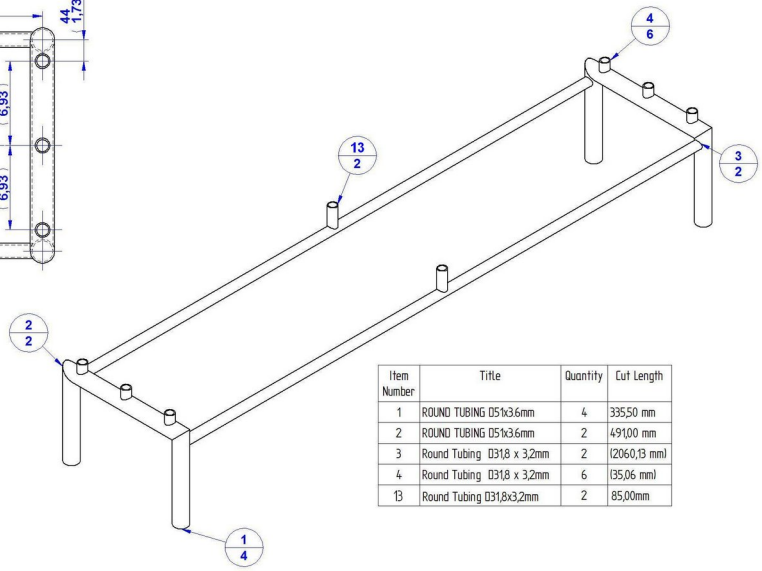




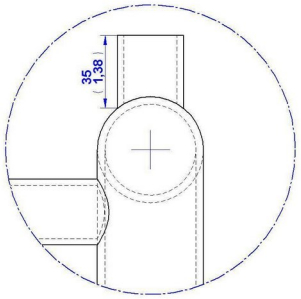




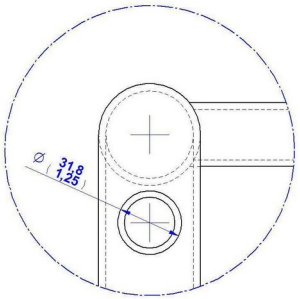




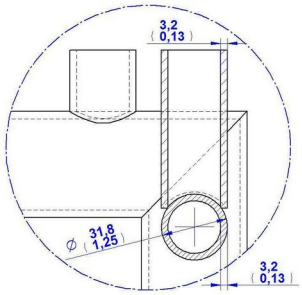
Item Number	Title	Quantity	Cut Length
1	ROUND TUBING Ø51x3.6mm	4	335,50 mm
2	ROUND TUBING Ø51x3.6mm	2	491,00 mm
3	Round Tubing Ø31,8 x 3,2mm	2	(2060,13 mm)
4	Round Tubing Ø31,8 x 3,2mm	6	(35,06 mm)
13	Round Tubing Ø31,8x3,2mm	2	85,00mm



DETAIL C

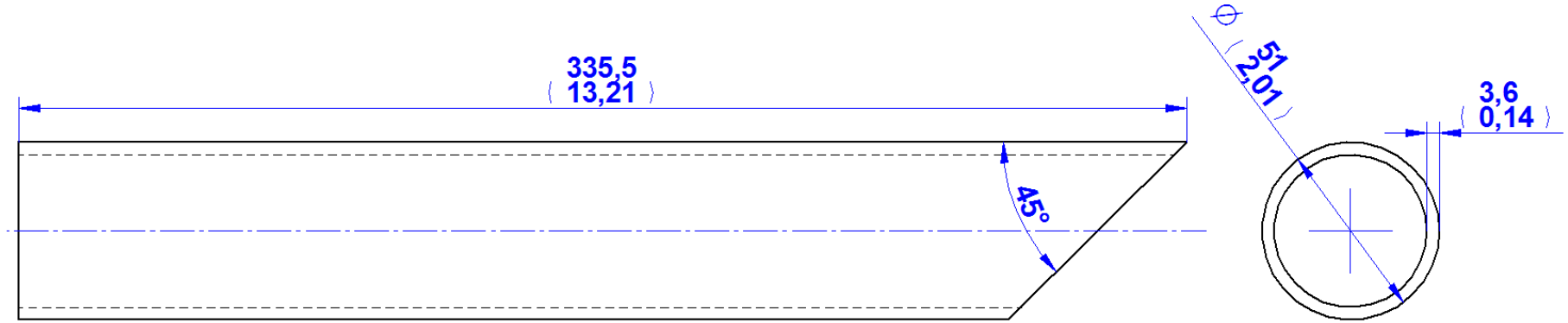


DETAIL D

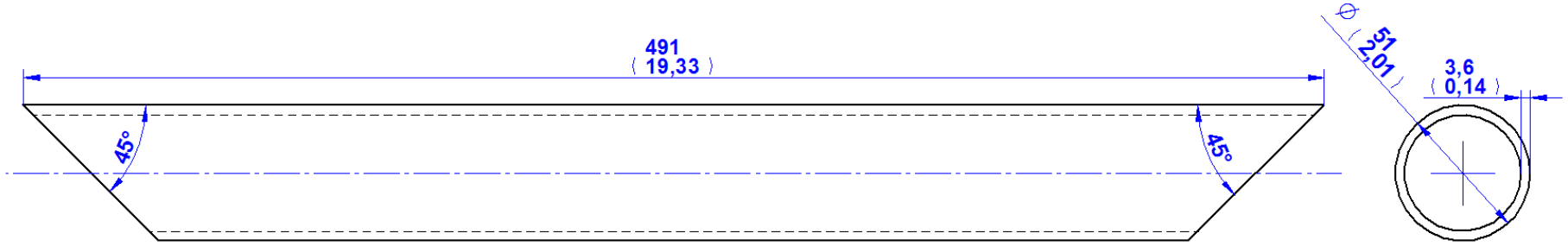


DETAIL E

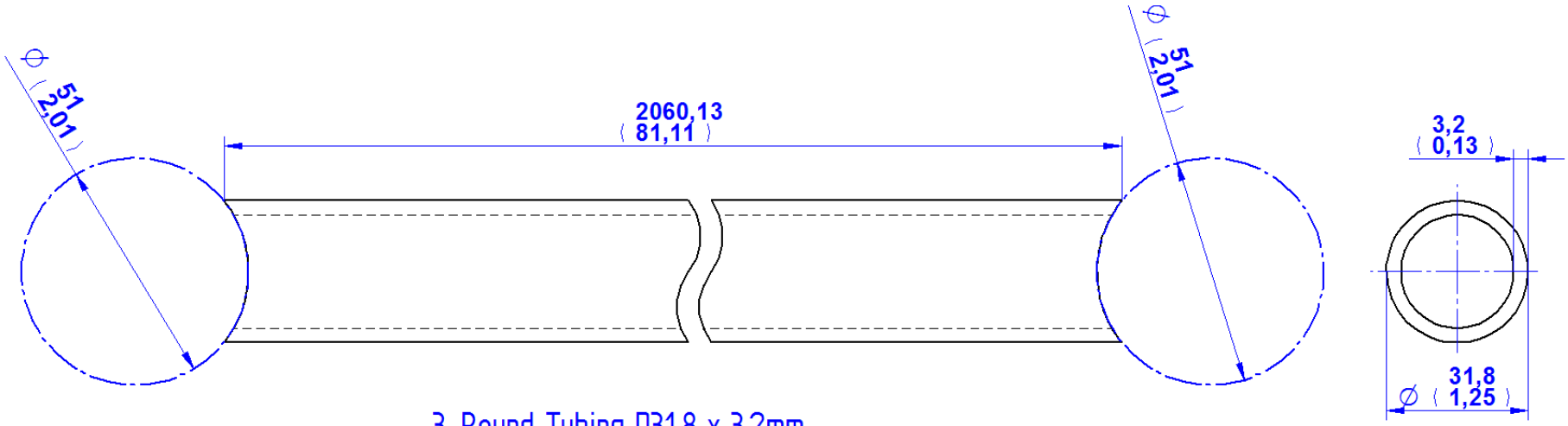
FRAME COMPONENTS (1, 2, 3, 4, 13)



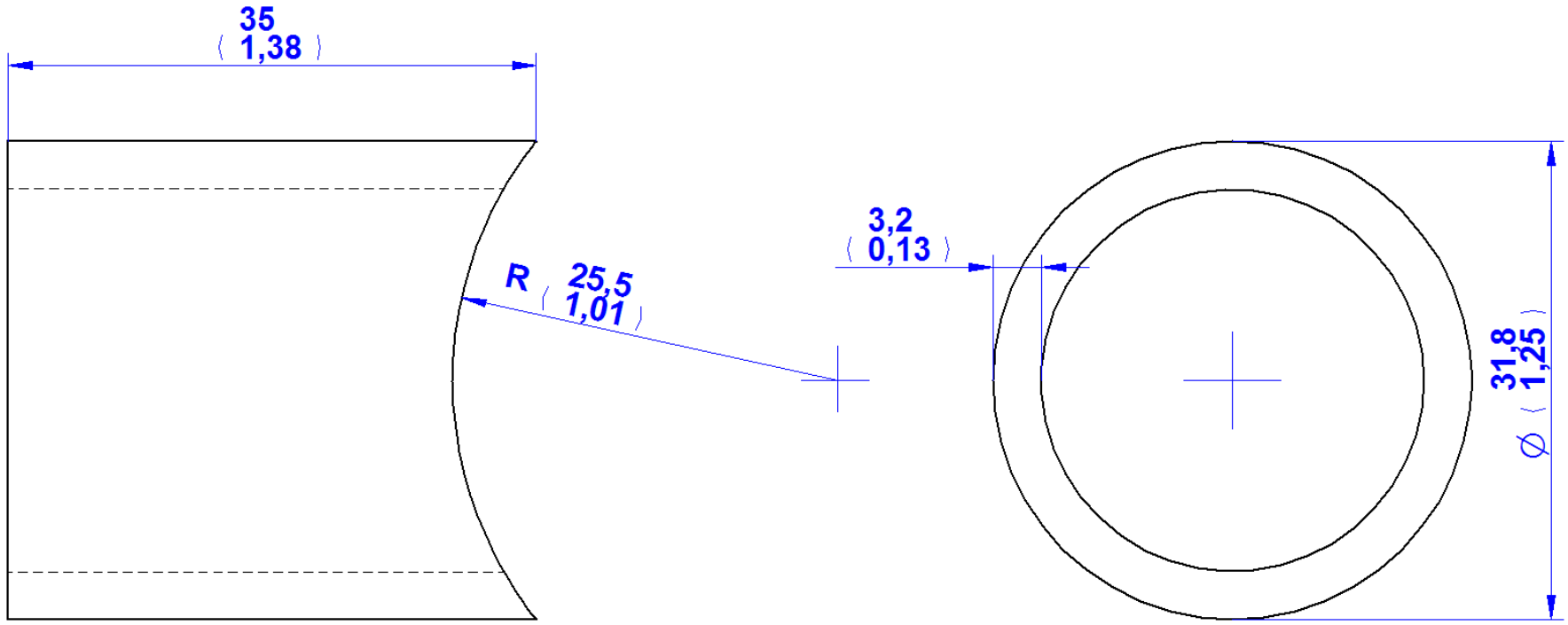
1. Round Tubing D51x3,6mm
Cut Lenght = 335,5mm



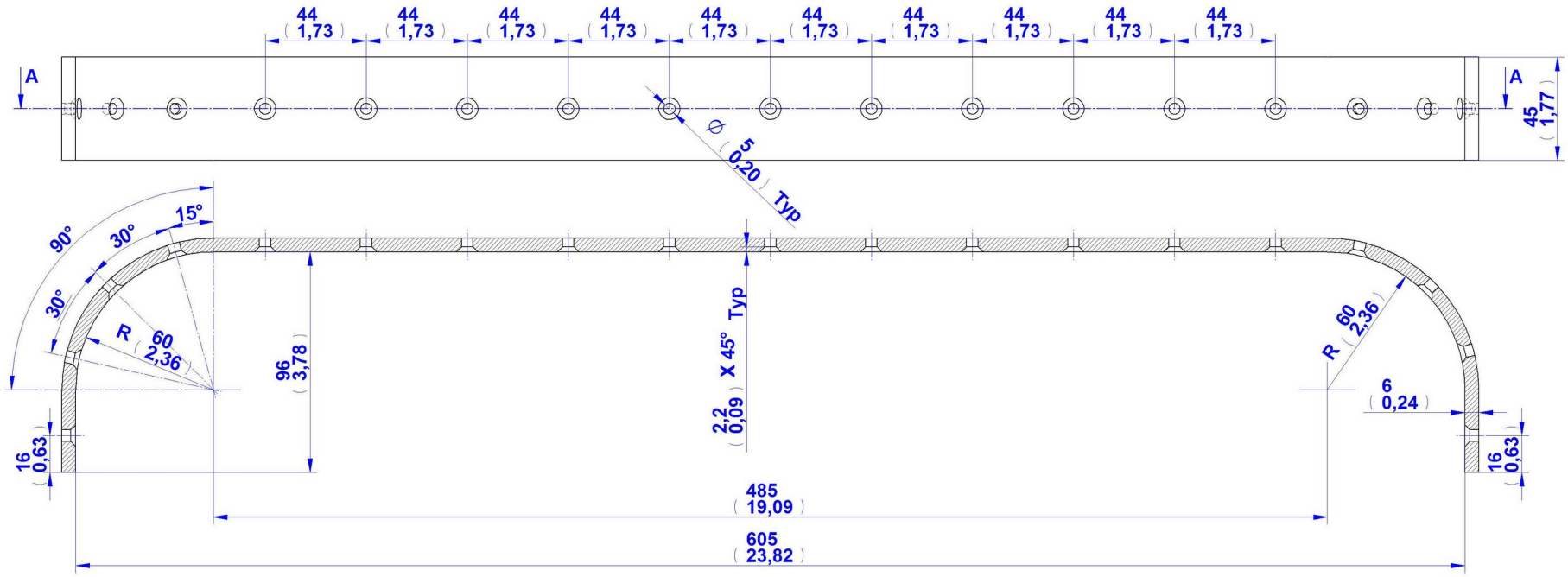
2. Round Tubing D51x3,6mm
Cut Lenght = 491,00mm



3. Round Tubing Ø31,8 x 3,2mm
Cut Lenght = 2060,13mm



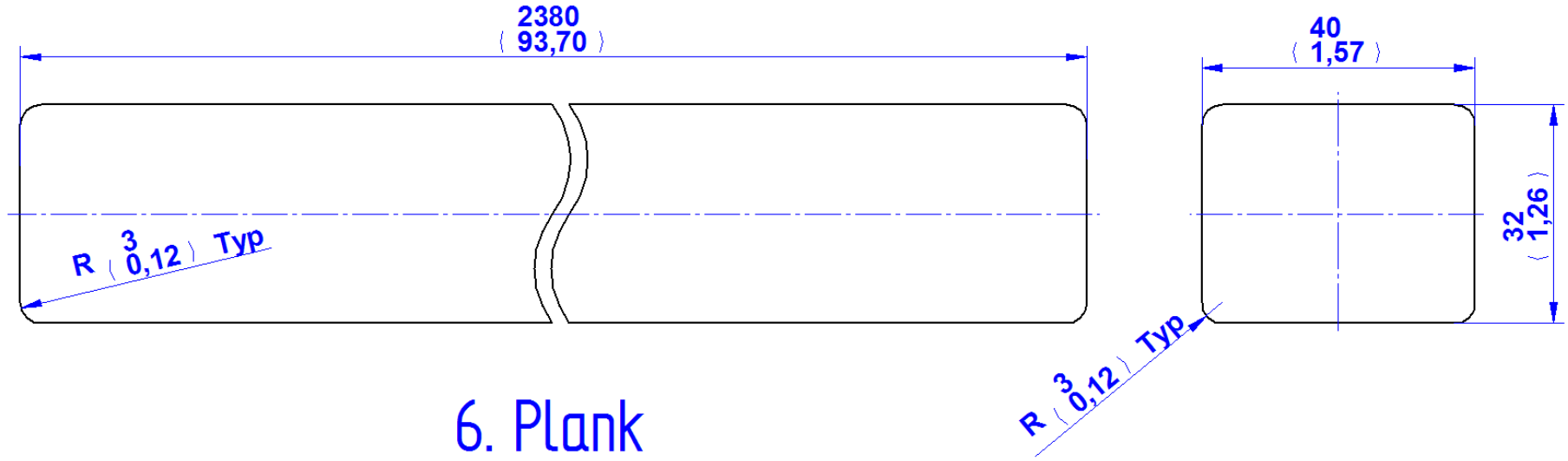
4. Round Tubing D31,8 x 3,2mm
Cut Lenght = 35,00mm



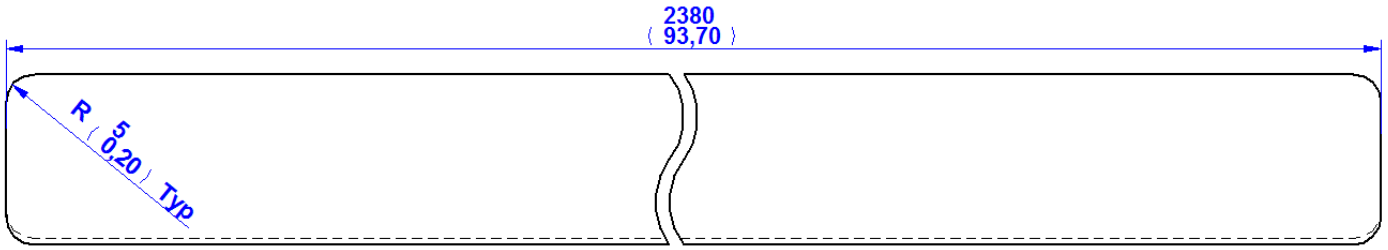
Drill holes during assemblage (after bending)

SECTION A-A

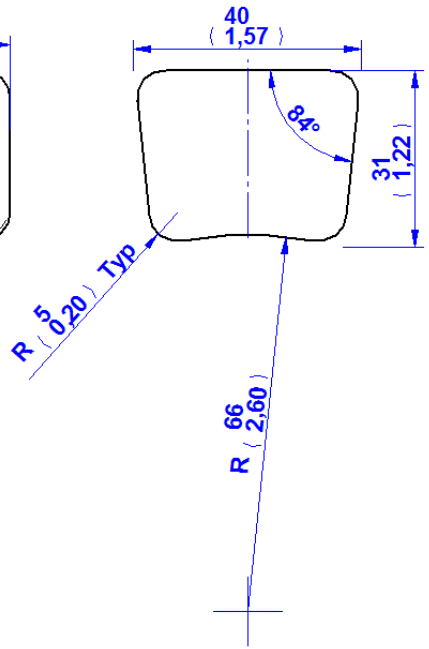
5. Plank Holder



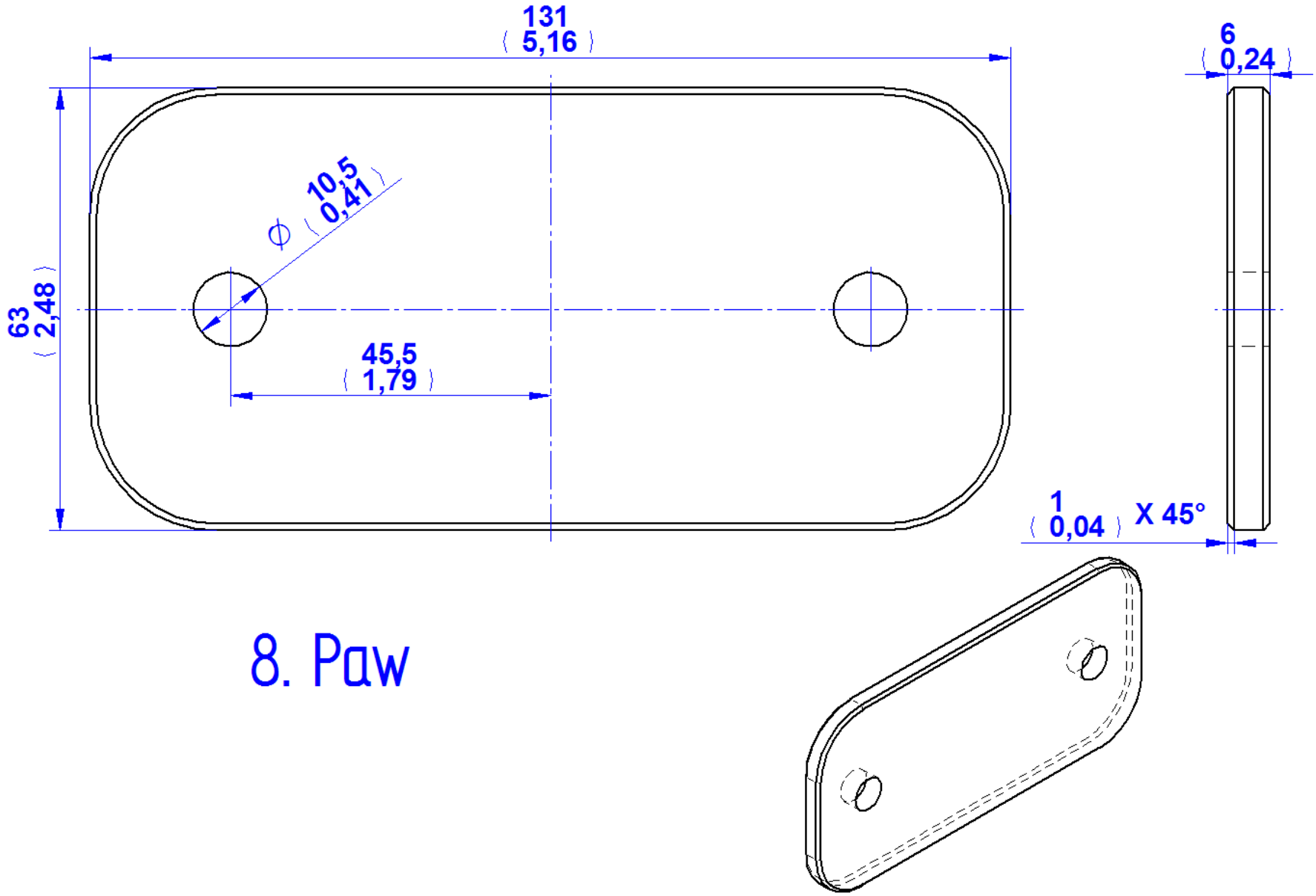
6. Plank



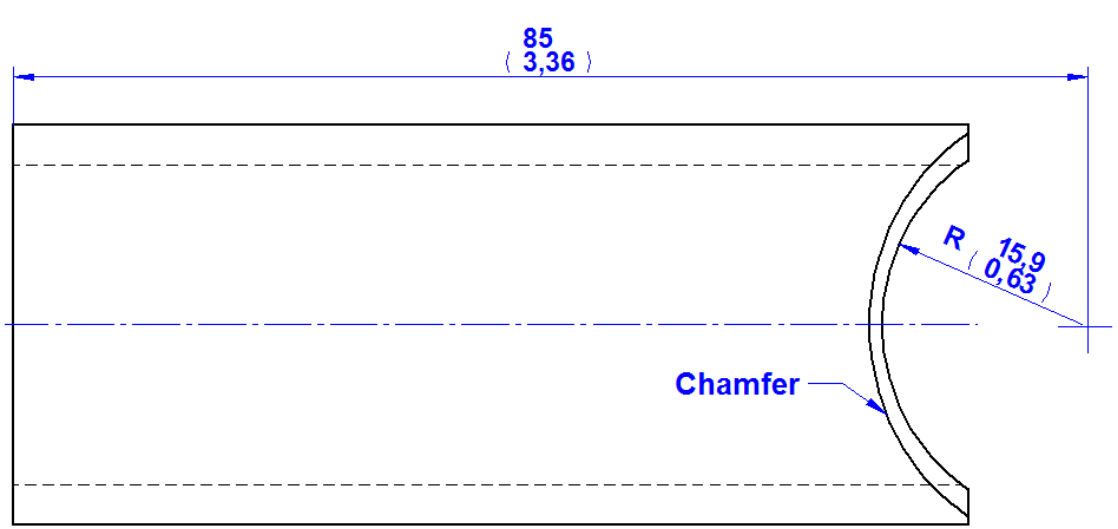
Stock plank 32x40x2380mm

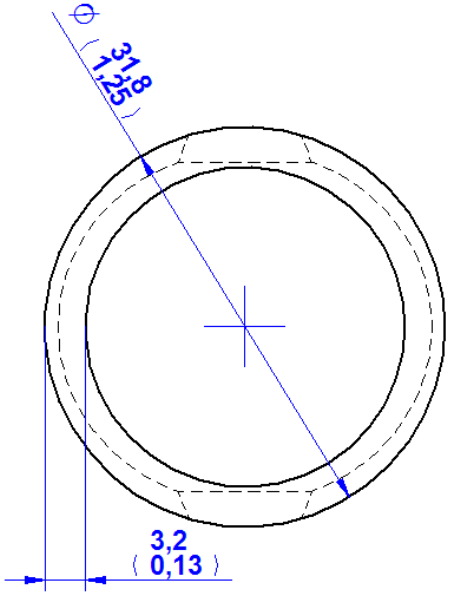


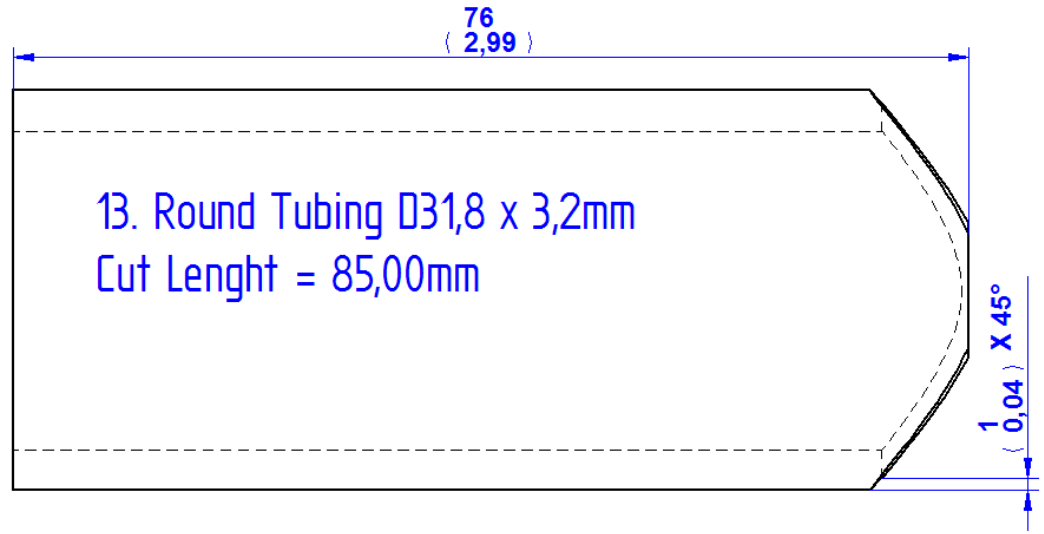
7. Plank Circle

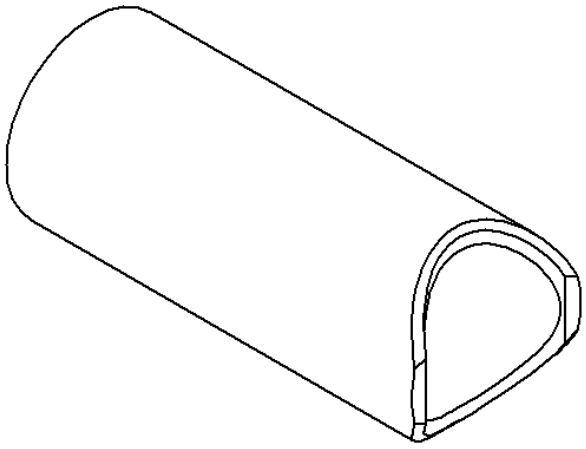


8. Paw

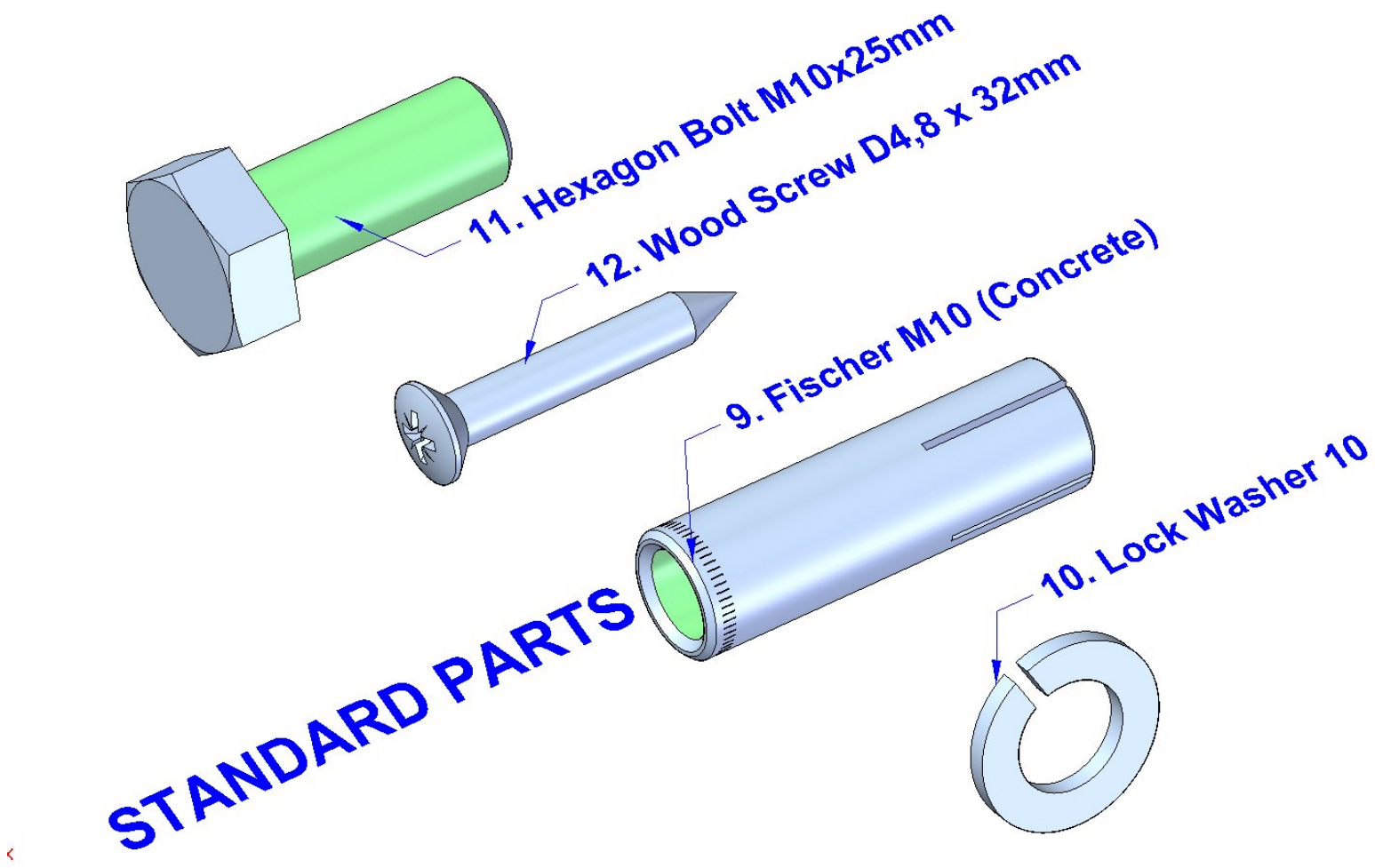

85
(3,36)
R (15,9 0,63)
Chamfer


Ø (31,8 1,25)
3,2
(0,13)


76
(2,99)
13. Round Tubing D31,8 x 3,2mm
Cut Lenght = 85,00mm
1 (0,04) X 45°

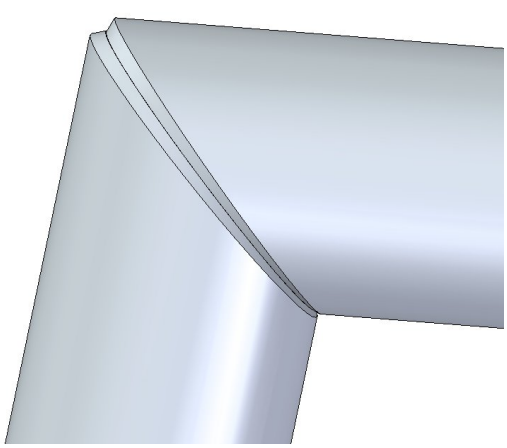


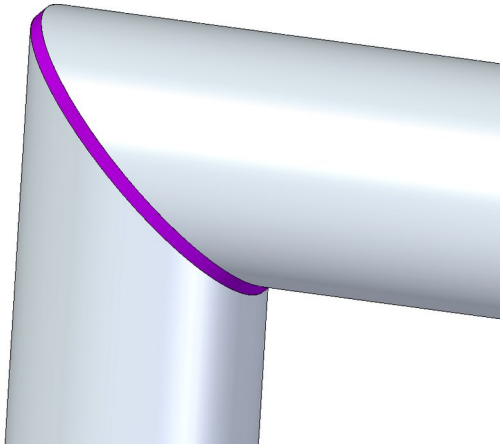
Standard parts

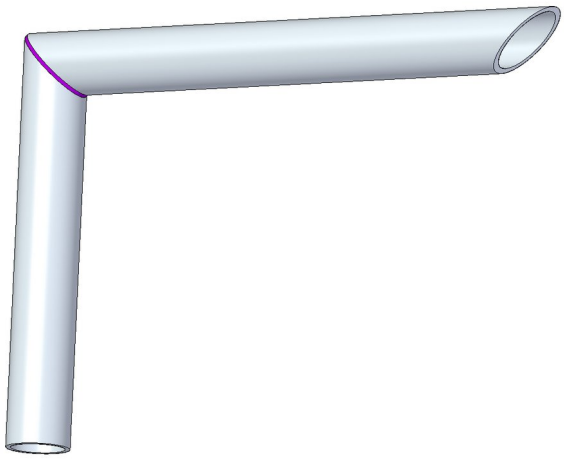


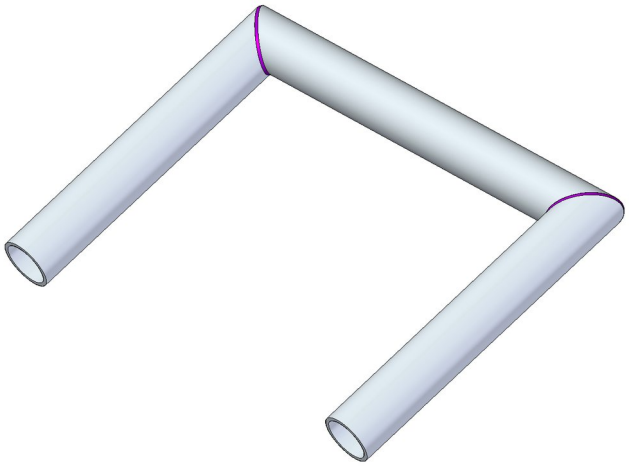
Assemblage images

1.

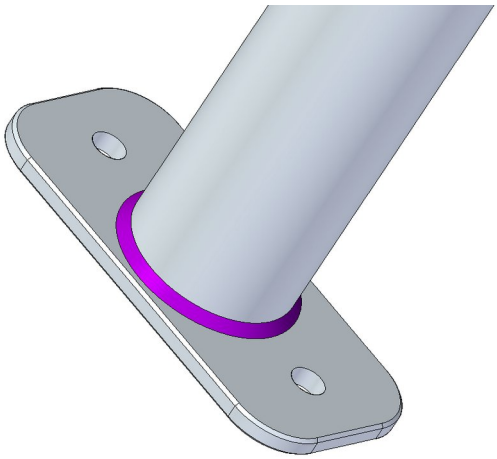


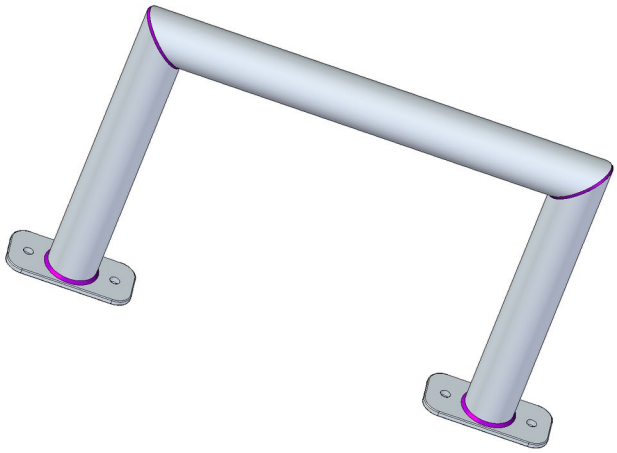




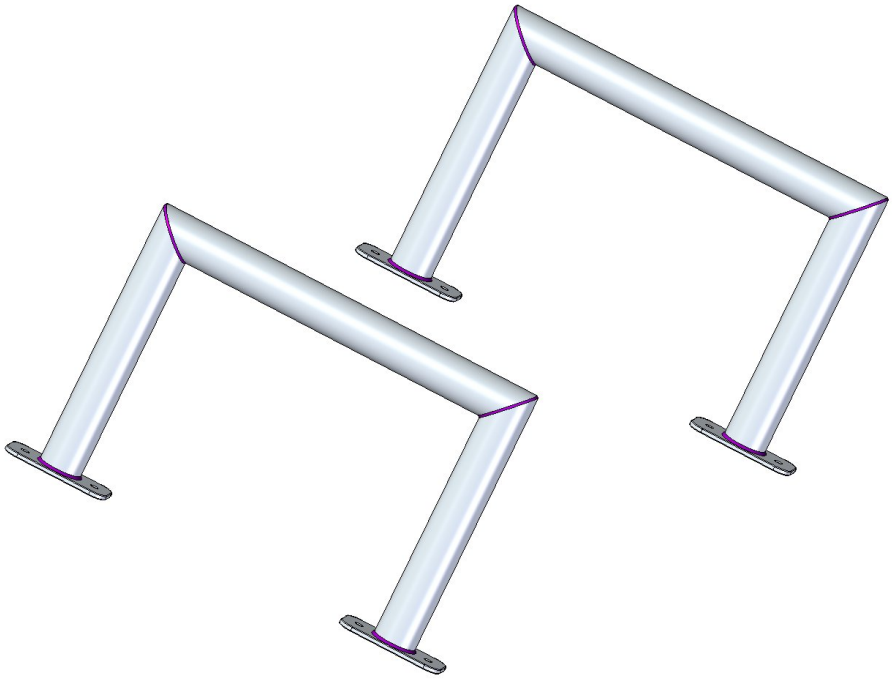


2.

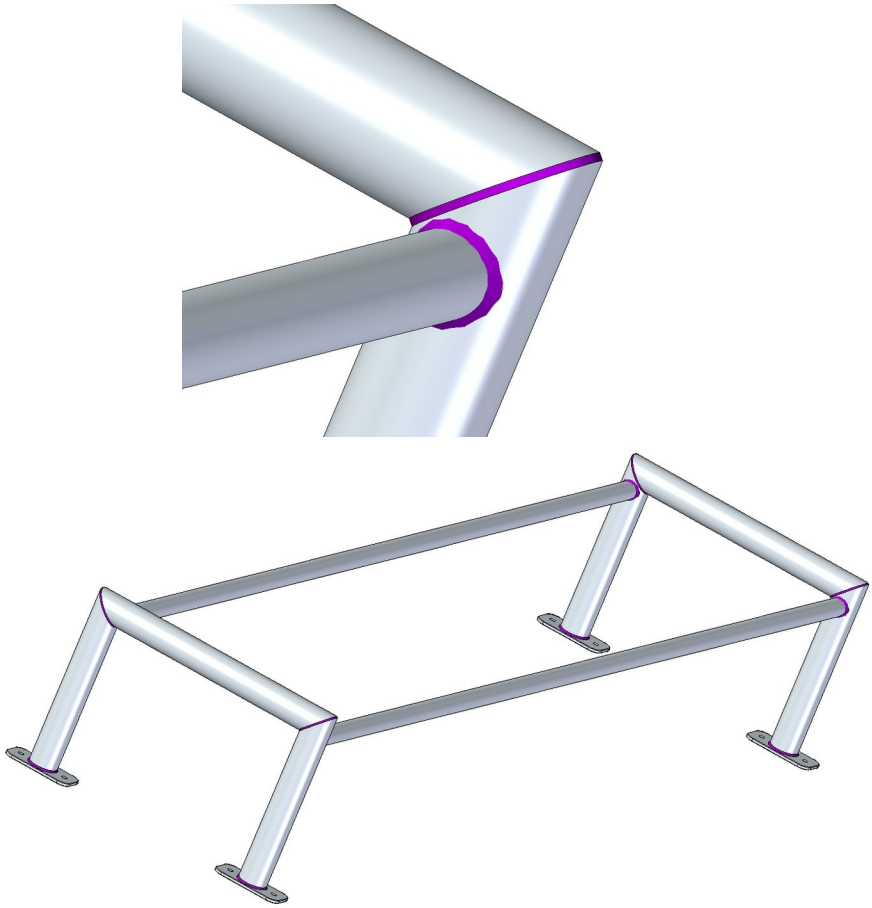




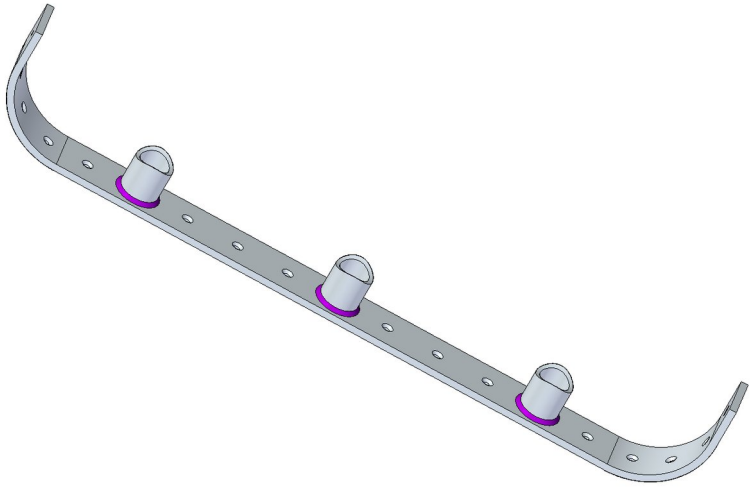
Make the two of these assemblies.



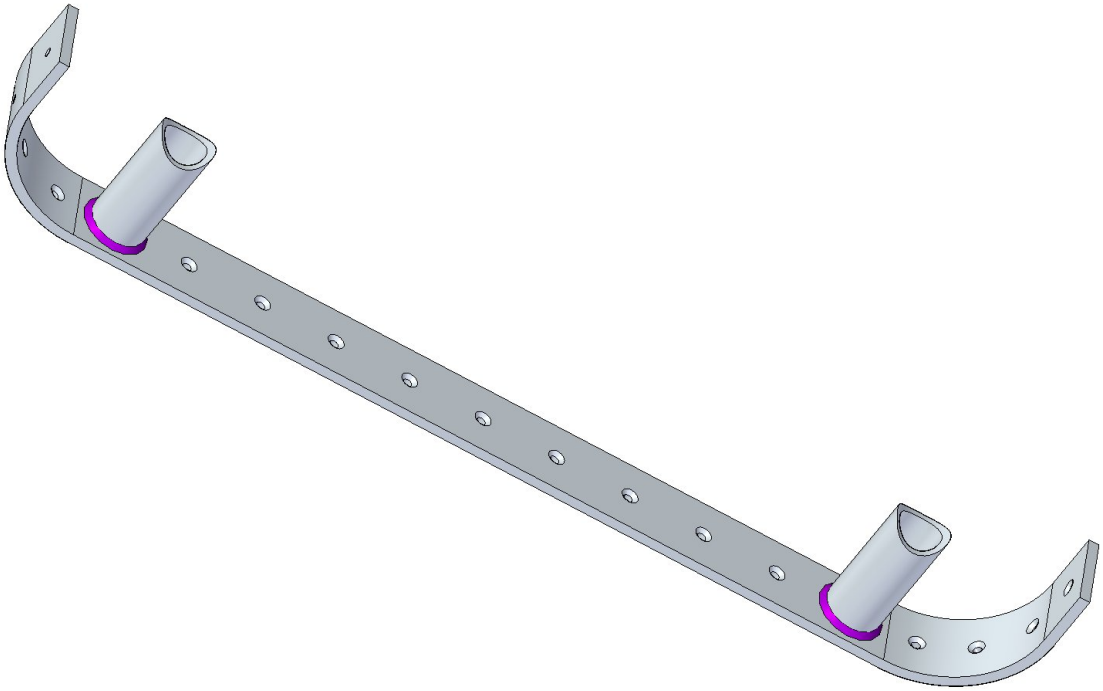
3.

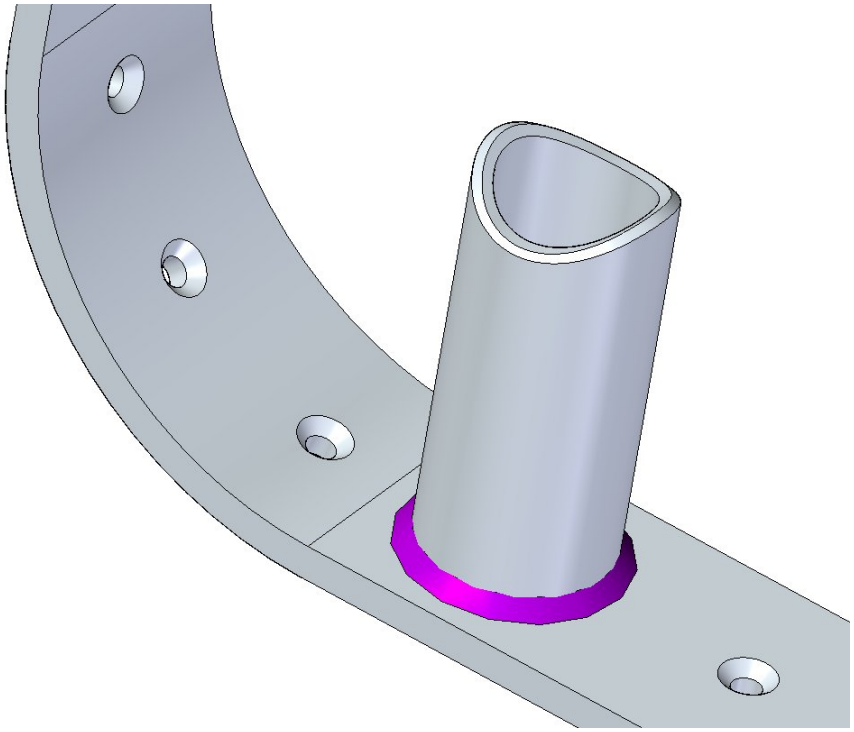


4.

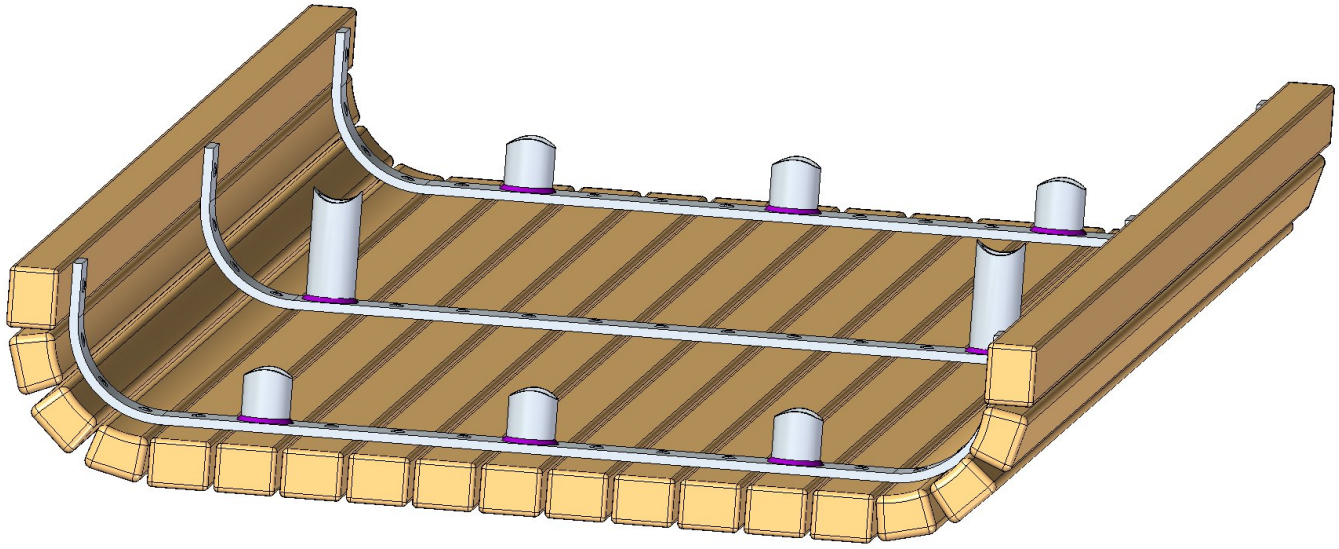


5.

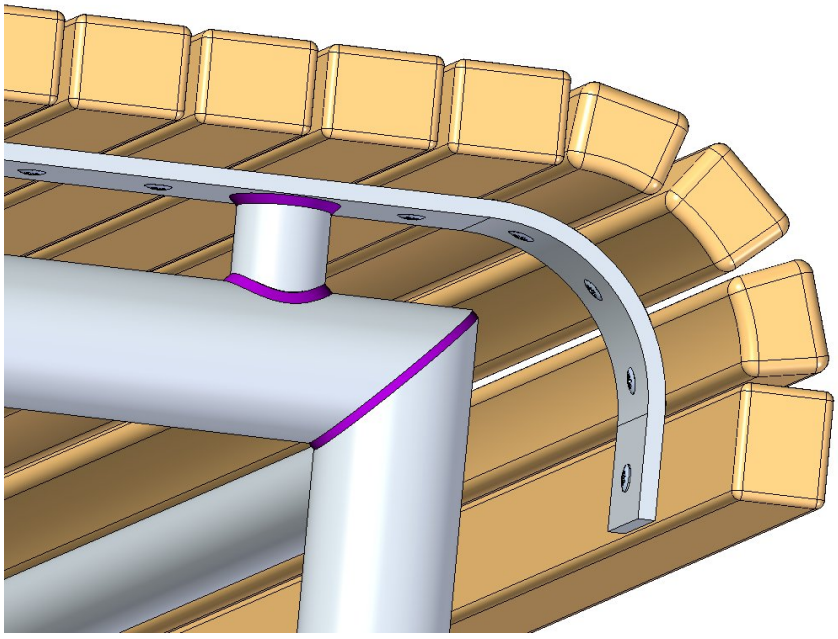


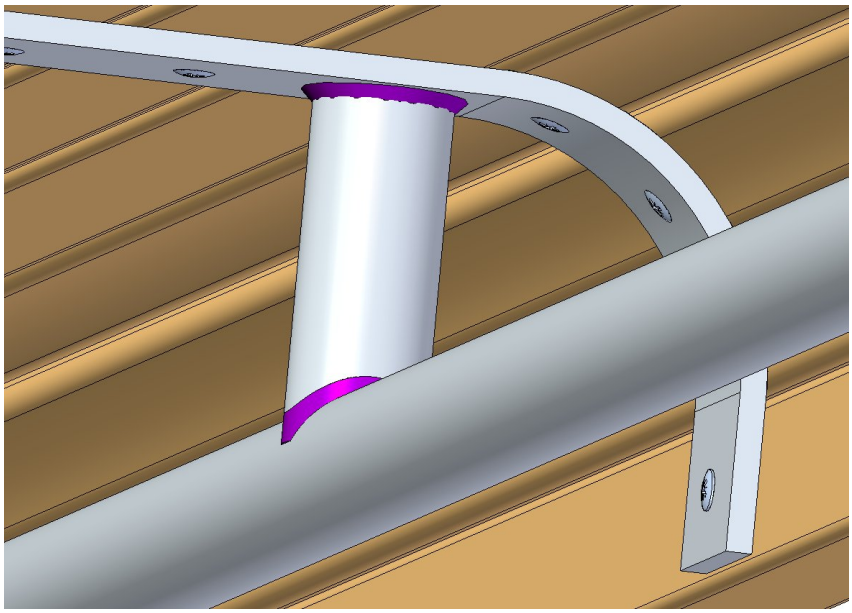


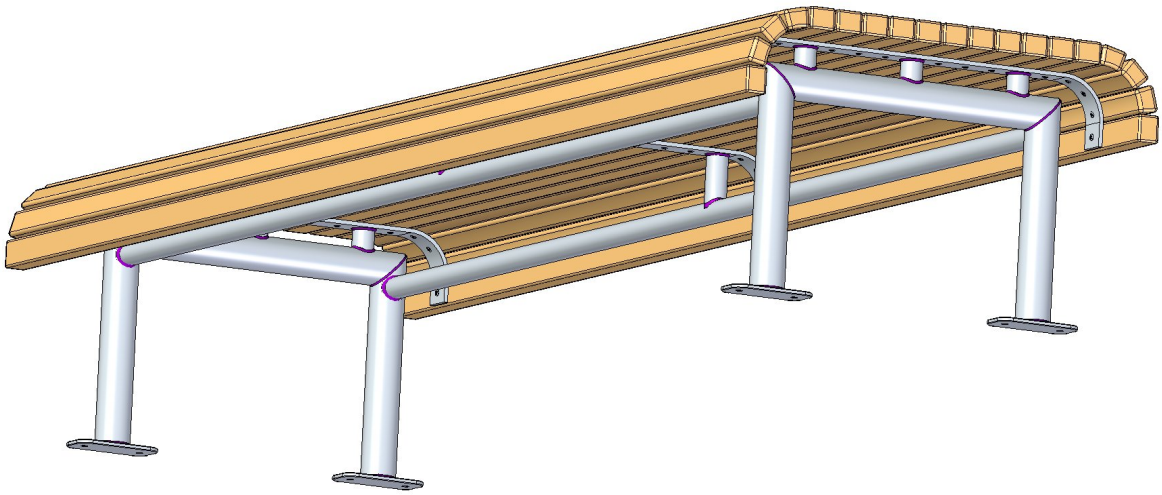
6.



7.







NOTE: The weldments have to be done very carefully. During the welding process, you need to make several short pauses, so the heat could not damage the wooden parts on the assembly made in step 6. You just have to be patient and wait every few minutes to let welds cool down.

All you have to do in the end is to choose some nice place in the park or your own yard and install the bench.