Instructions

Washing hands independatly

FIXPERTS

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This project was created by us

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industrial design students

Holon Institute of Technology, Israel.

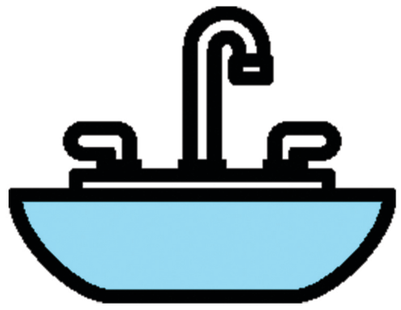
We created two seperate devices both attended to make it easier for people who experience movement limitations in their hands to independetly wash their hands.

Our main device connects to the faucet and anables the user to easily open and close it.
The action only requieres one action - moving the hand downwards.

Our second device is a soap tray that collects the soap, thus disabling the need of using two hands.

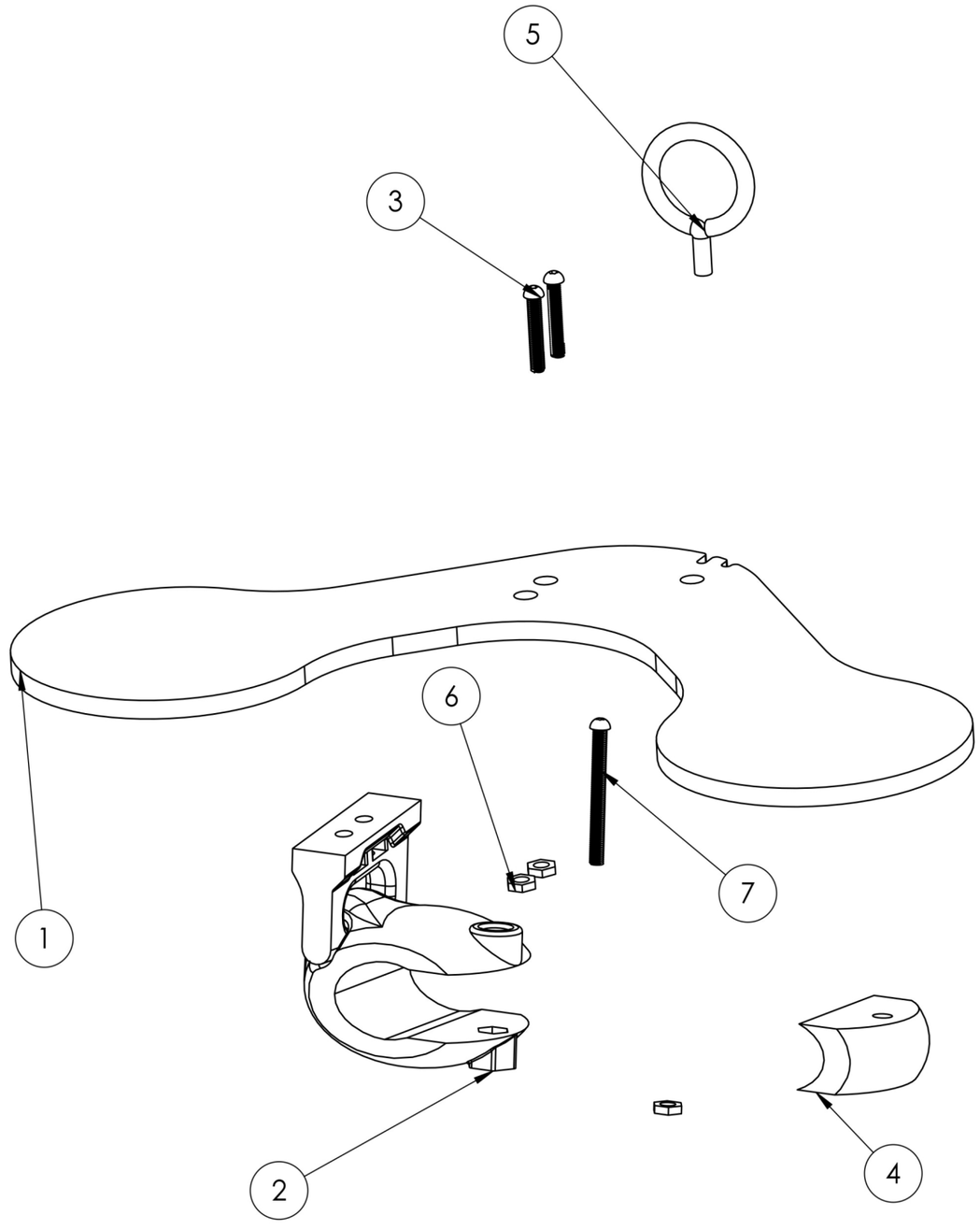
JOFEL

JOFEL



The faucet swing

ITEM NO.	Part name	Production tech	Material	File name	QTY.
1	Swing	Laser cutting	8mm acrylic	Swing	1
2	Hinge	3D printing	ABS	Hinge	1
3	Bolt20	Shelf product	stainless steel	-	2
4	HingeCloser	3D printing	ABS	HingeCloser	1
5	O ring	Shelf product	Rubber	-	1
6	Nut	Shelf product	stainless steel	-	3
7	Bolt35	Shelf product	stainless steel	-	1



DWG NO. Explode

A3

SCALE:1:1.5

SHEET 1 OF 7

List of materials-

ABS Filament
3 mm Acrylic 30×60
×2 Stainless Steel screw 4m 20
×1 Stainless Steel screw 4m 35
×3 Stainless Steel 4m nut
×1 O-ring diameter 50 mm, width 3 mm

List of Technologies-

3D Printing
Laser cutting

Step 1: 3D printing

STL File - "MainHinge"
SLD File - "HingeBody"

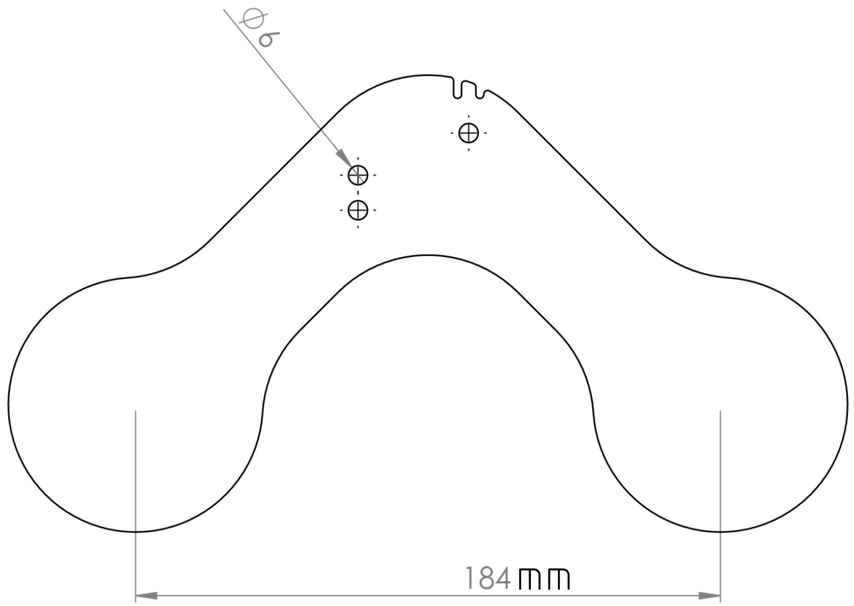
If you have a different faucet change the cut at the Cut extrude feature named "MidHole" andthe sketch within it named "ChangeHole".

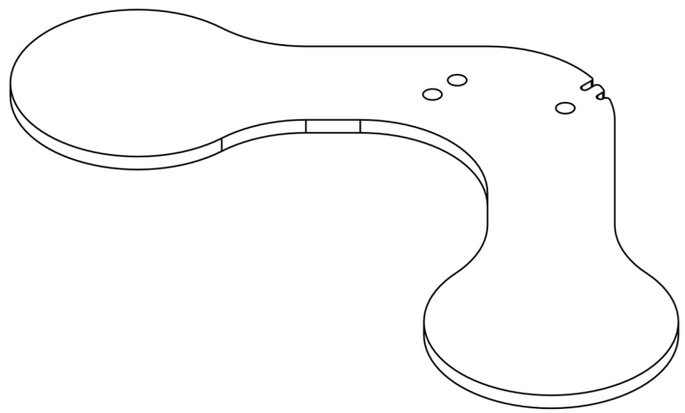
Step 2: Laser cutting

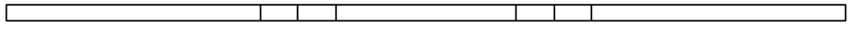
DXF File - "Swing"
We wanted it colored in blue, which can only be obtained in 3 mm thickness material, so we cutted it twice and glued together. Otherwise, cut once 6 mm thickness material.

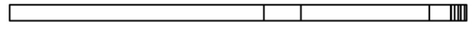
Step 3: Assembly

Assembly instructions - https://youtu.be/TXQWhMbyJCA

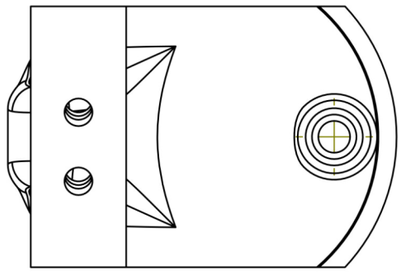


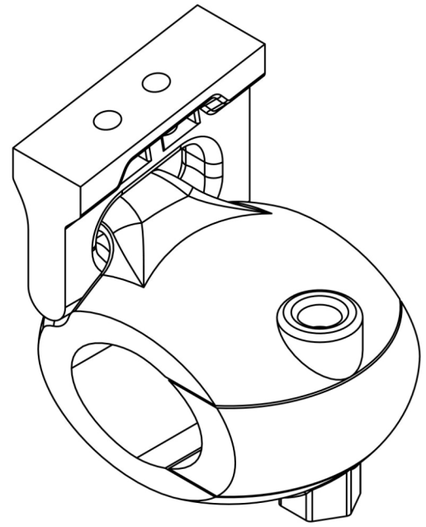


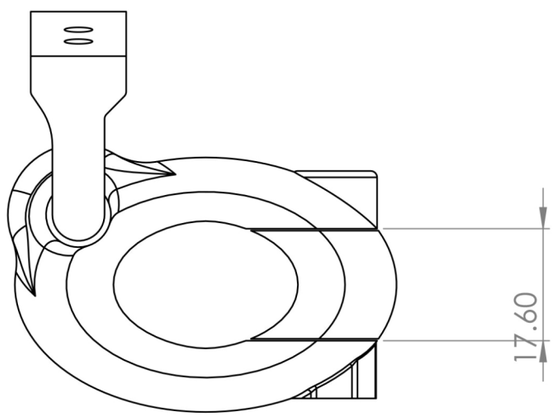


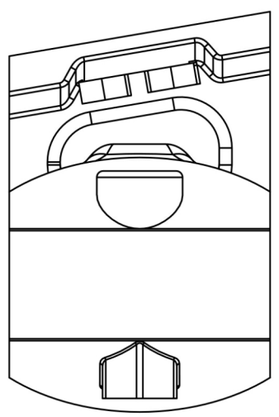


DWG NO. Swing		A3
SCALE:1:2	SHEET 2 OF 7	

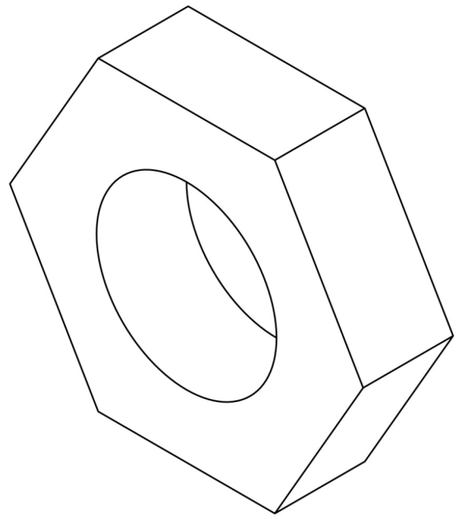


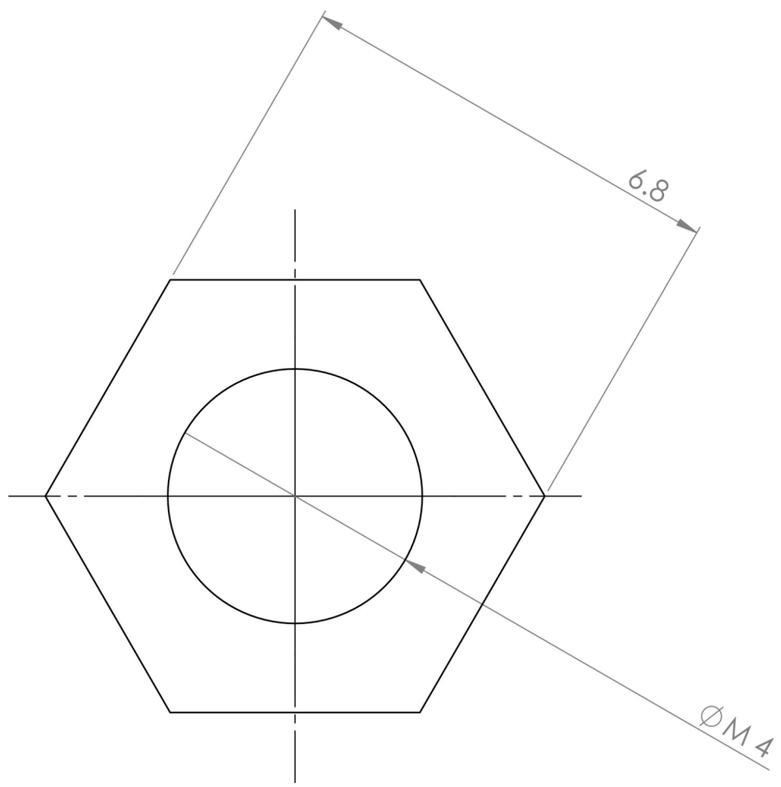


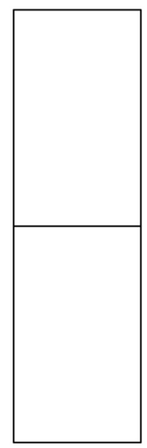




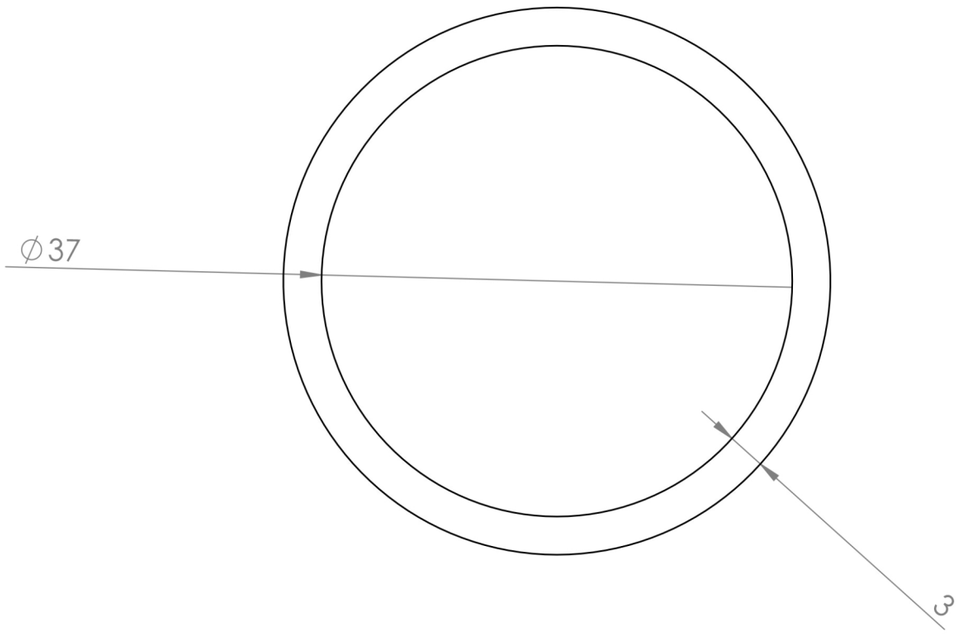
DWG NO. Hinge + Hinge closer	A3
SCALE:1:1	SHEET 3 OF 7



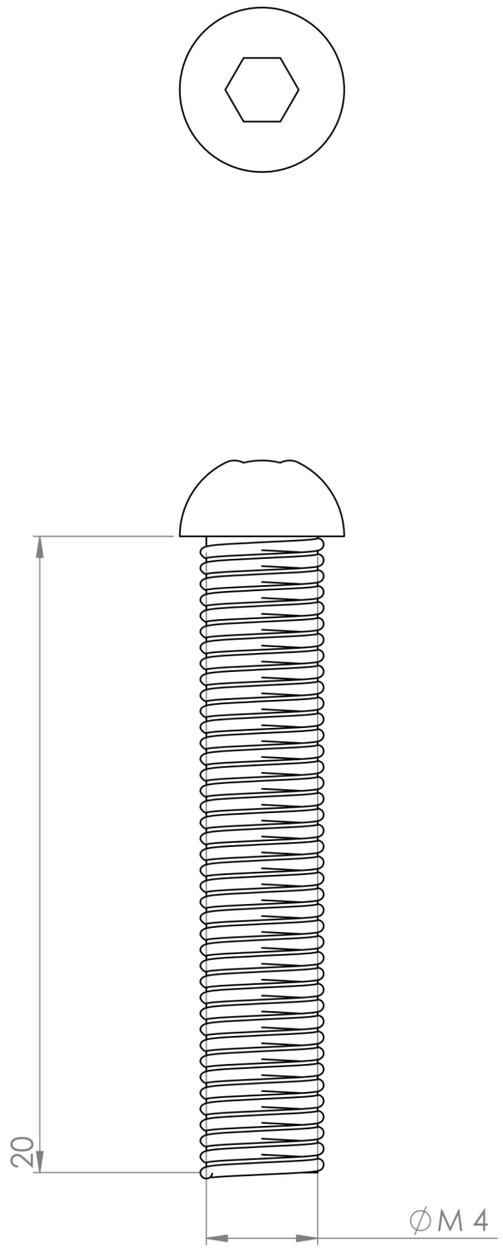




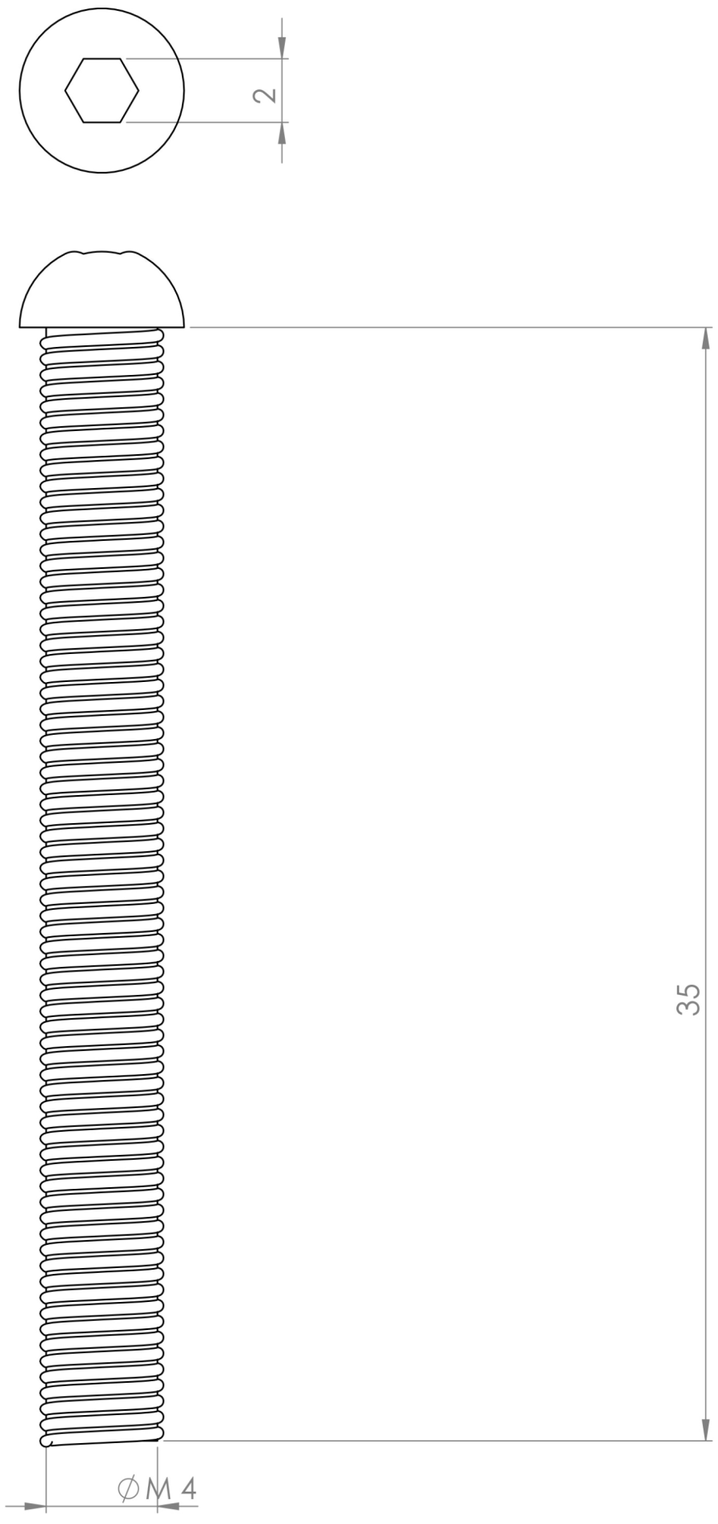
DWG NO. Nut		A3
SCALE:10:1	SHEET 4 OF 7	



DWG NO. O Ring		A3
SCALE:2:1	SHEET 5 OF 7	

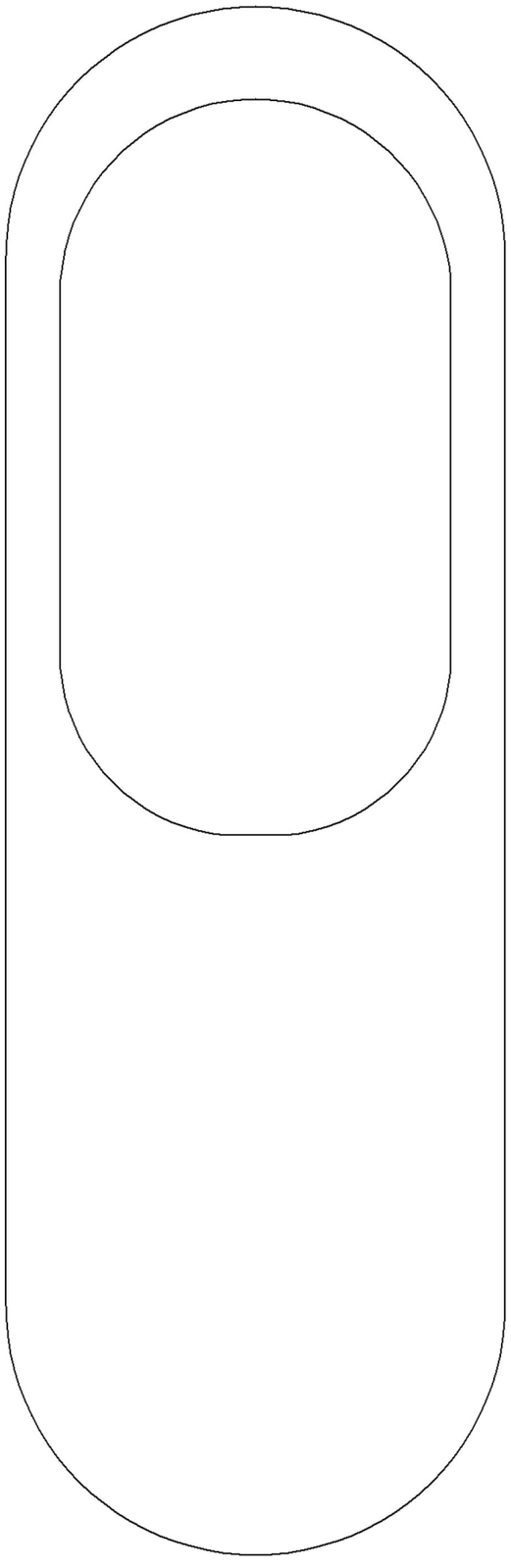


DWG NO.	A3
Bolt	
SCALE:5:1	SHEET 6 OF 7



DWG NO. Explode	A3
SCALE:5:1	SHEET 7 OF 7

The soap tray



ITEM NO.	Part name	Product tech	Material	File name	QTY.
1	Soap	Laser cutting	4 mm Acrylic	Soap	1

List of materials-

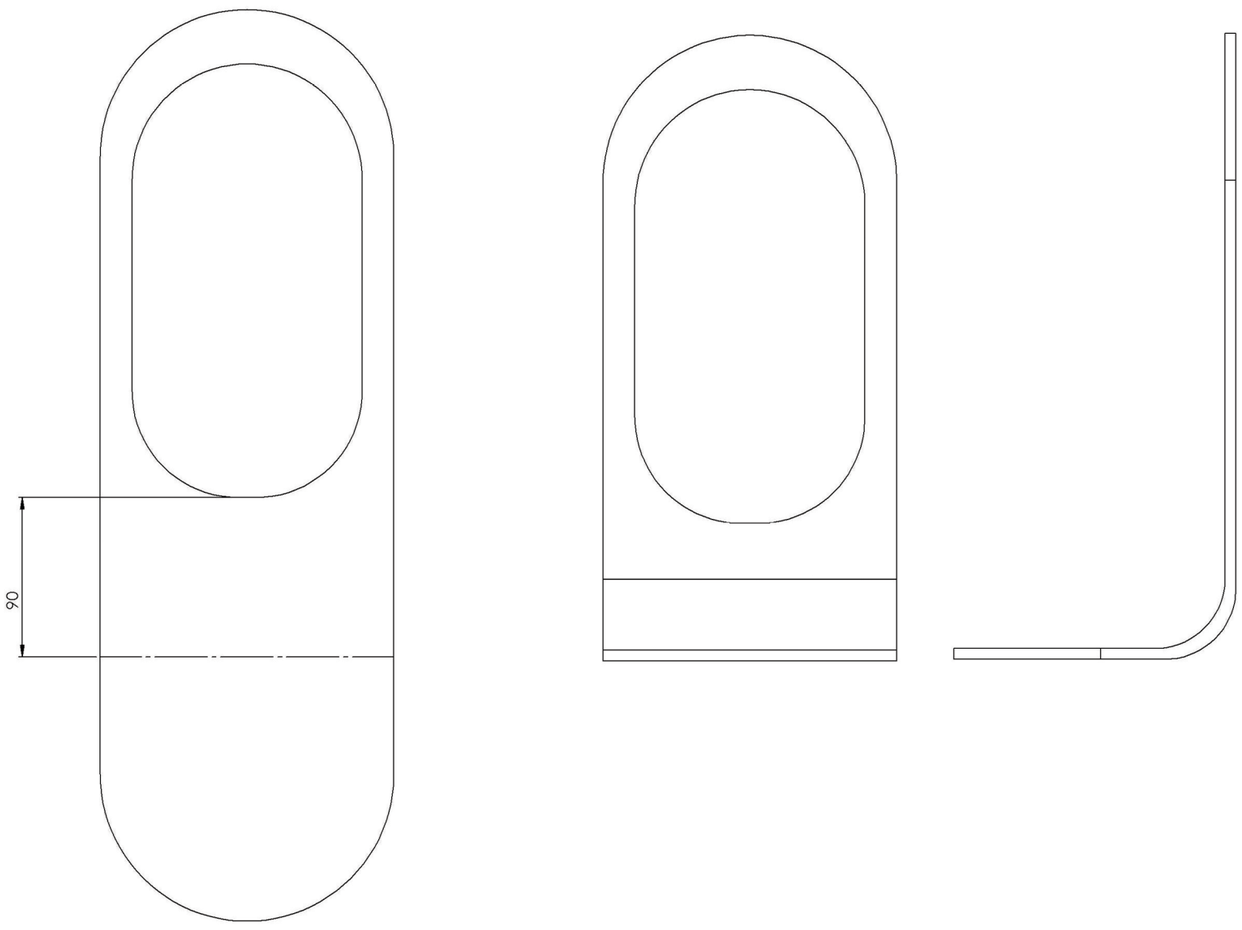
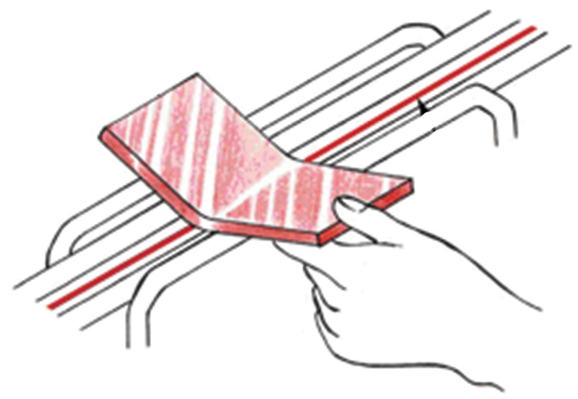
6 mm Acrylic 17×52

List of Technologies-

Laser cutting

Step 1: Laser cutting

DXF File – "Soap"

Step 2: Bending

Heat bend using an industrial fan or a heatline.