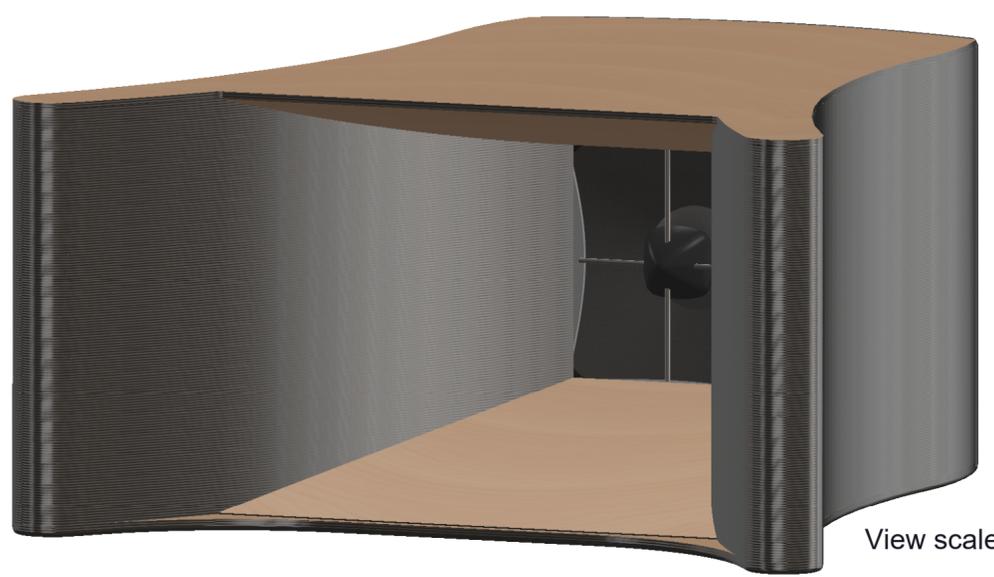


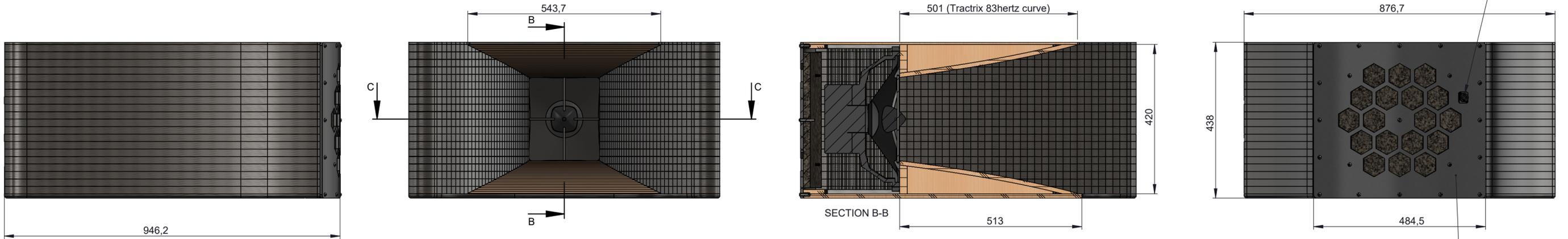
REVISIONS HISTORY				
REV.	DESCRIPTION	DATE	CONSTR/DRAWN	APPROVED
1	Issued for construction	19.04.2020	E. Haglund	E. Haglund
2	General update	03.05.2020	E. Haglund	E. Haglund

Tractrix horn is chosen for its benefits of good transient response, and to release the Soundwave from the horn with minimal reflections back to the horn. When plane waves travel down through a conventional horn and reaches the end of the mouth, suddenly there's a acoustical discontinuity, where the waves exit into space. So, you get reflections at the mouth, which travel back to the throat and set up a quarter-wavelength resonance condition. With the Tractrix horn, since the waves are spherical going through the horn, they exit the mouth with very few reflections. The horn length is slightly different in the vertical plane and the horizontal plane. this is done to distribute the remaining reflections over a wider range, to even it out.



View scale 1:5

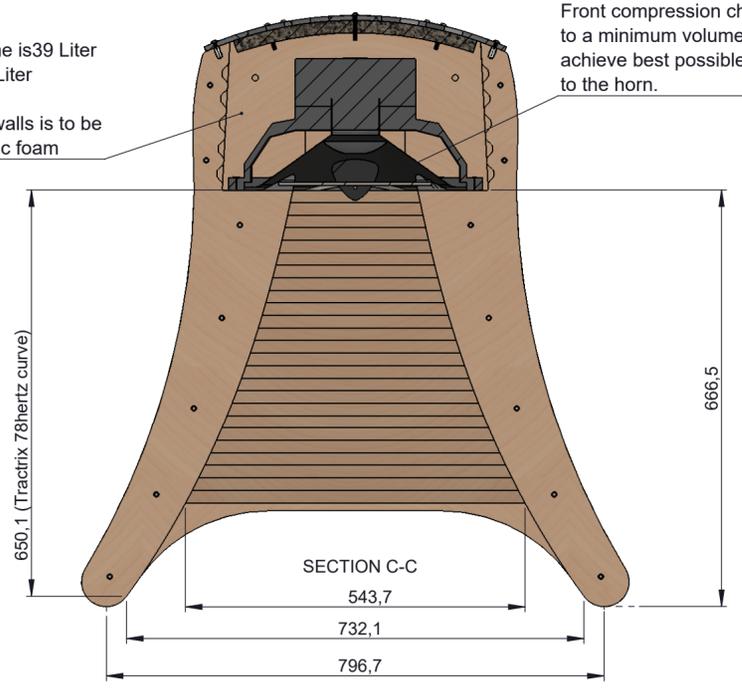
Throat area with phase plug: 418cm²
 Throat area excluding the phase plug: 468cm²
 Tractrix horn Mouth area: 3075cm²
 Total Mouth area: 3490cm²



Rear chamber volume is 39 Liter
 Driver consumption 7 Liter
 = 32 Liter.
 Rear chamber side walls is to be damped with Acoustic foam

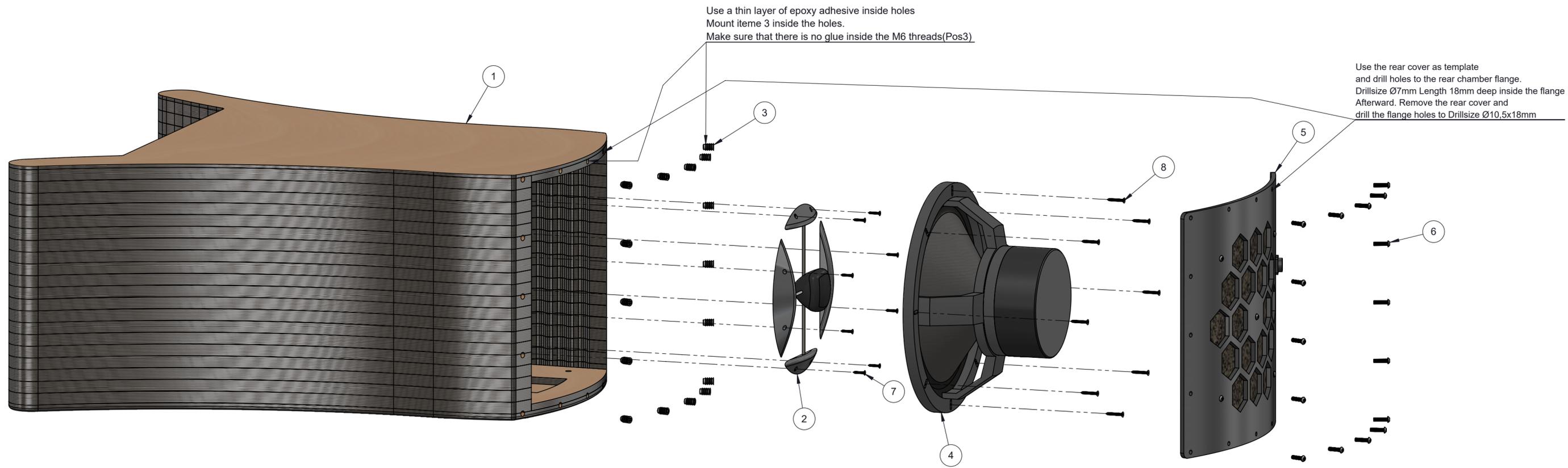
Front compression chamber is reduced to a minimum volume. This is done to achieve best possible acoustic connection to the horn.

Resistive Rear Chamber Patented By Rune Skramstad.
 With purpose to evenly balance the acoustical pressure in the rear chamber with the acoustical pressure inside the horn and to even the driver impedance. This principle decreases reflections/Backfire from the rear chamber back through the membrane.



BOM Table				
Pos	Qty	Description	Material	Part number
1	1	2020CA400 - FLH Tractrix curved 82hz	Birch Plywood	
2	1	2020AC202 - Phase Plug Assembly	ABS Plastic & Stainless steel	
3	16	439618001 - RAMP A Inserts Type SKD30 M6x18 Steel zink	Steel zink	
4	1	GPA 515C	Varius	
5	1	2020CA204 - Rear cover 2	Aluminium	
6	16	Bolt button head M6x25 Elz ISO 7380 10 9	Steel Zink	
7	8	Screw Countersunk 3_5x22mm Torx A4 ISO 14586	Stainless Steel	
8	8	Screw Countersunk 4_2x32mm Torx A4 ISO 14586	Stainless Steel	

Measures without specified tolerances: NS-ISO 2768-1 Mittels				
Creation date: 19.04.2020	Constr./ Drawn: E. Haglund	Tracet: E. Haglund	Scale: 1:8	
Control: 19.04.2020	Standard Control: E. Haglund	Approved: E. Haglund		
Paint spec: Surface treatment according to appendix				
Drawing number & part name: 2020AC600 - FLH			Part number: -	
Reference: -	Calculations: -	© copyright		Sheet: 1 of 2
			Size: A2	



Use a thin layer of epoxy adhesive inside holes
 Mount item 3 inside the holes.
 Make sure that there is no glue inside the M6 threads(Pos3)

Use the rear cover as template
 and drill holes to the rear chamber flange.
 Drillsize Ø7mm Length 18mm deep inside the flange
 Afterward. Remove the rear cover and
 drill the flange holes to Drillsize Ø10,5x18mm

Measures without specified tolerances: NS-ISO 2768-1 Mittels				 	
Creation date: 19.04.2020	Constr./ Drawn: E. Haglund	Tracet: E.Haglund	Scale: 1:5		
Control: 19.04.2020	Standard Control: E. Haglund	Approved: E. Haglund		System integration at all levels 	
Paint spec: Surface treatment according to appendix				Drawing number & part name : 2020AC600 - FLH	
Reference: -				Part number: -	
Calculations: -			© copyright		Sheet: 2 of 2
					Size: A2