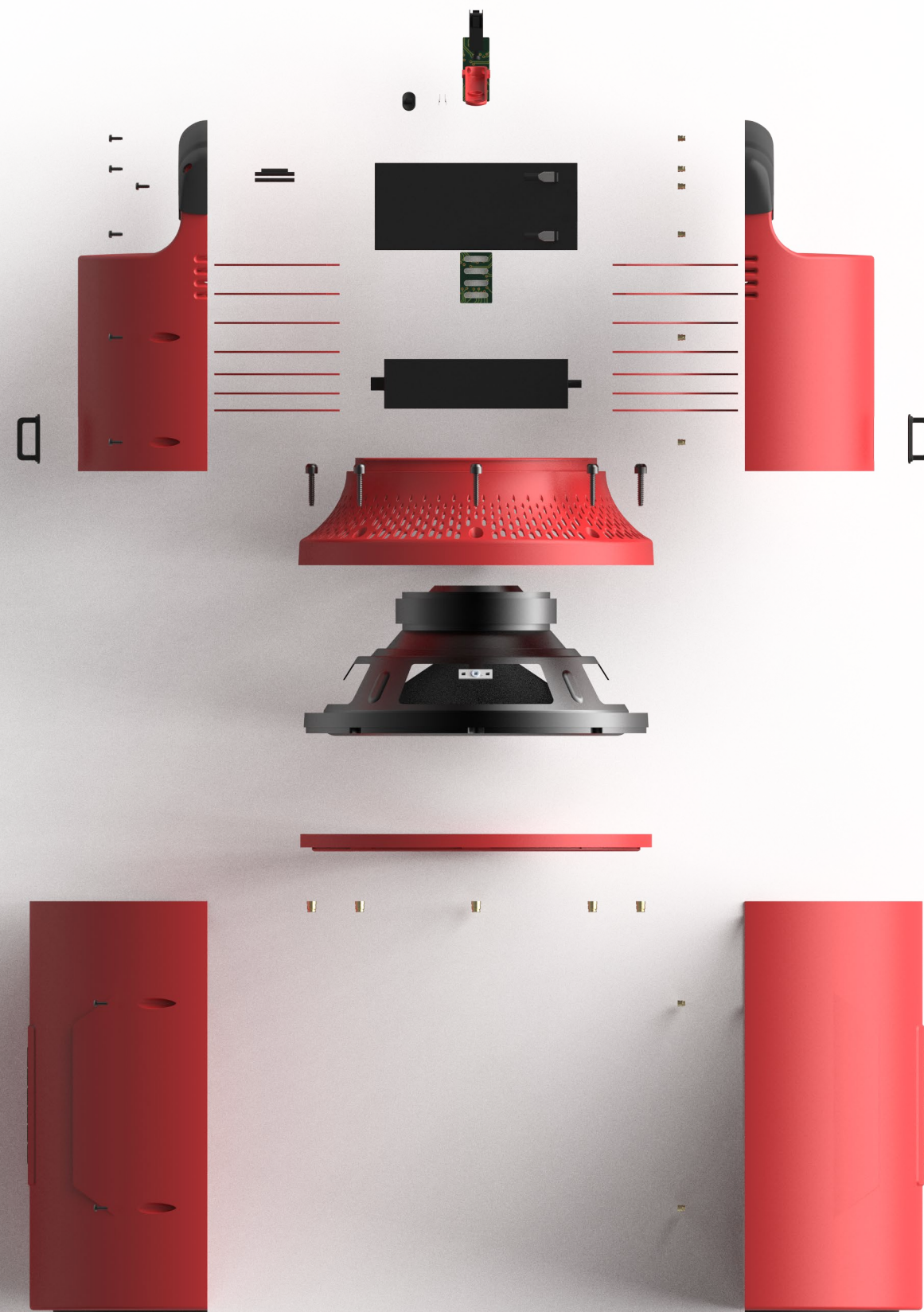




FMP

Vortex Sound Extinguisher

Waylan Jacobs

The Problem



California has experienced record breaking fires this year (2020). There has been an increasing amount of residents moving into WUI's (Barclay, 2020) and wildfires have been getting worse in California (Krishnakumar & Kannan, n.d.).

Product Features

Allows the user to easily turn the extinguisher on when needed.



Previous on button changed to safety trigger.



Safety button so its only turned on for it's specific purpose .



Product Features



TPE rings for the extinguisher to stand on. Lifts the extinguisher off the floor slightly to give it a “lighter” look.

Circular pattern to give a reference of sound wave coming out.

Product Features

TPE on the handle to make it comfortable for the user and improve their grip.

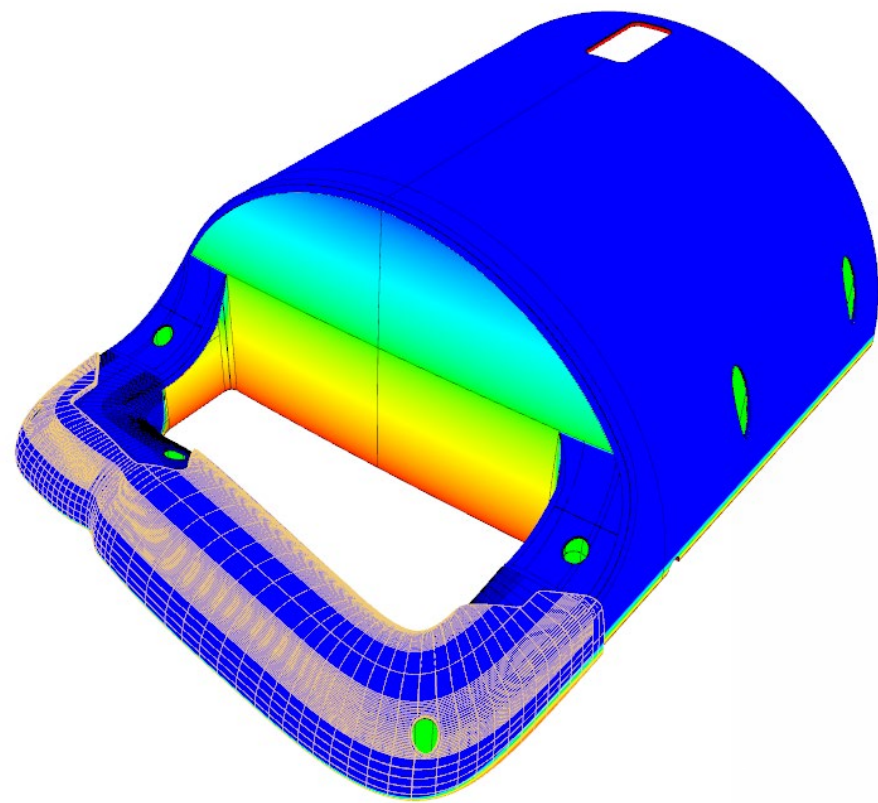
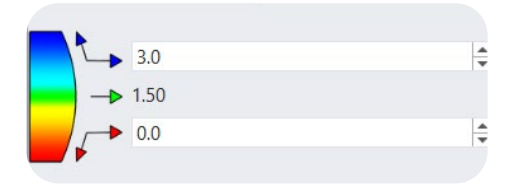
Specifically placed over the split line of the handle to avoid hard split line when holding.

DC port for charging on the back of the extinguisher.

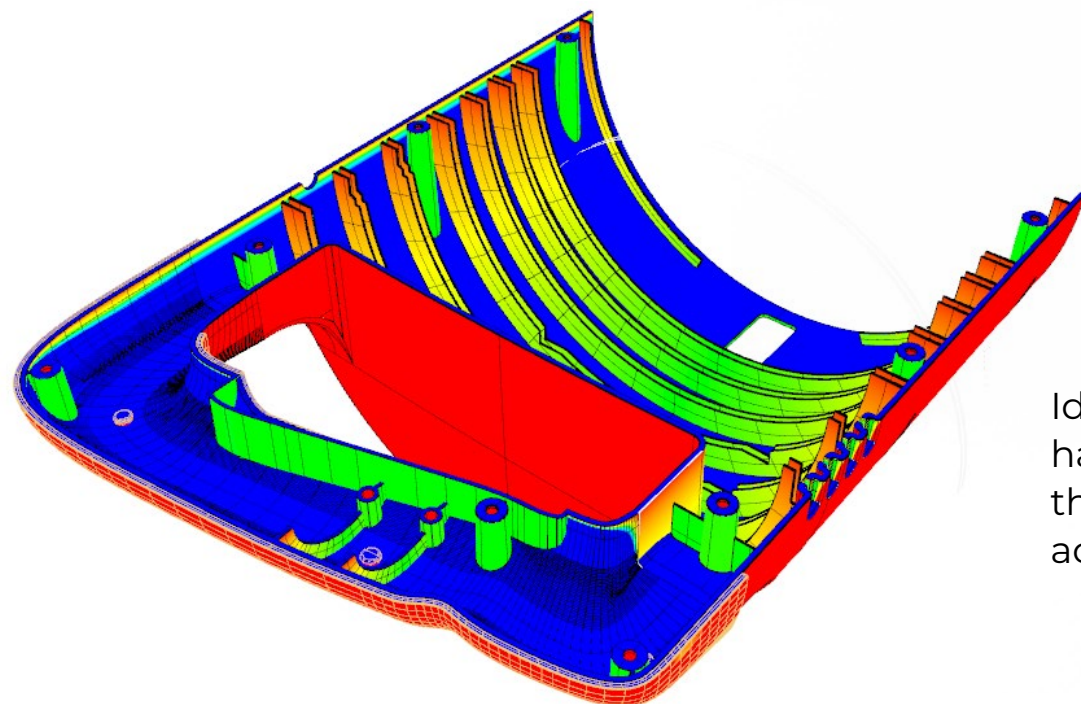
Placed in an open accessible place to make it easy for the user.



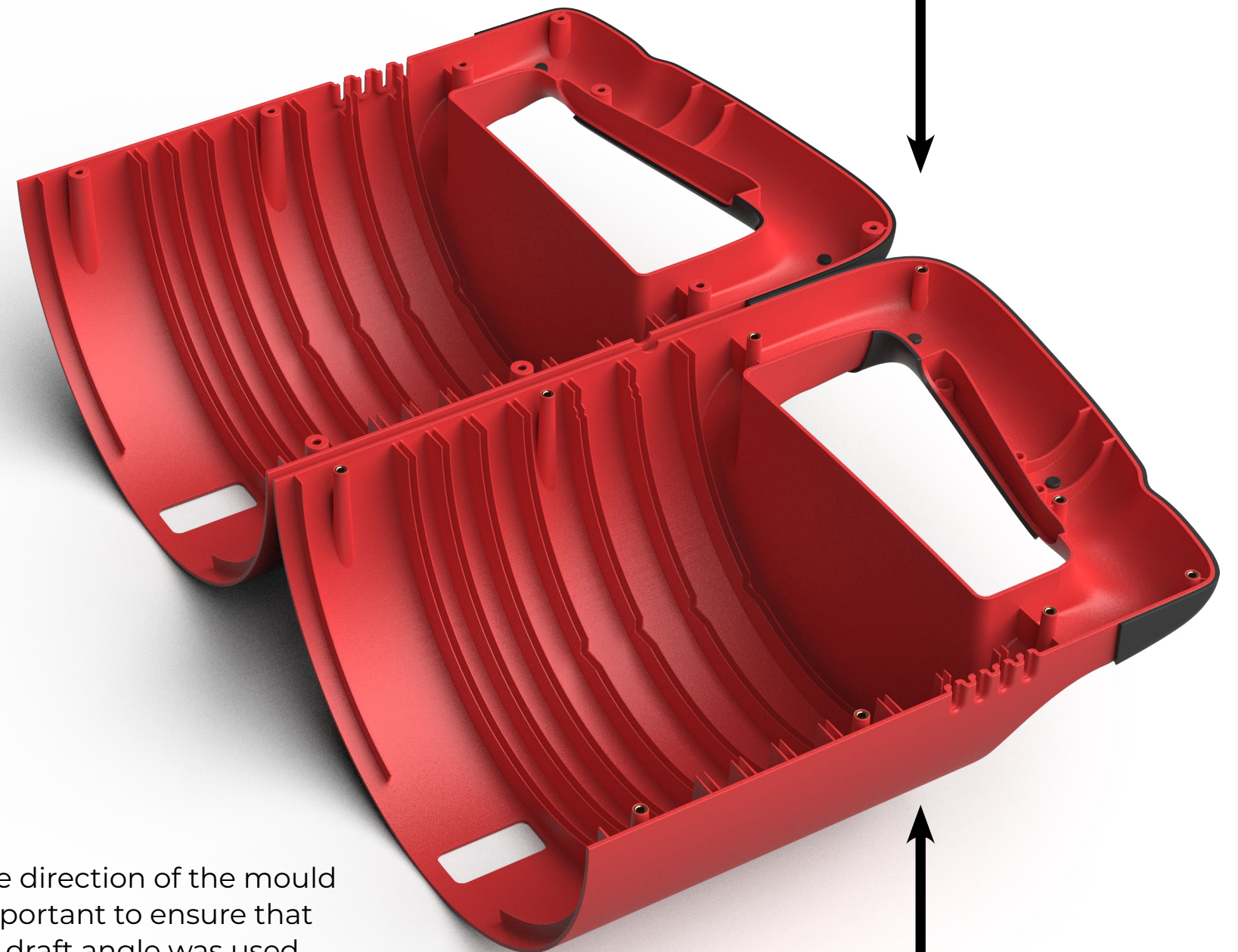
DFM-Back Housing



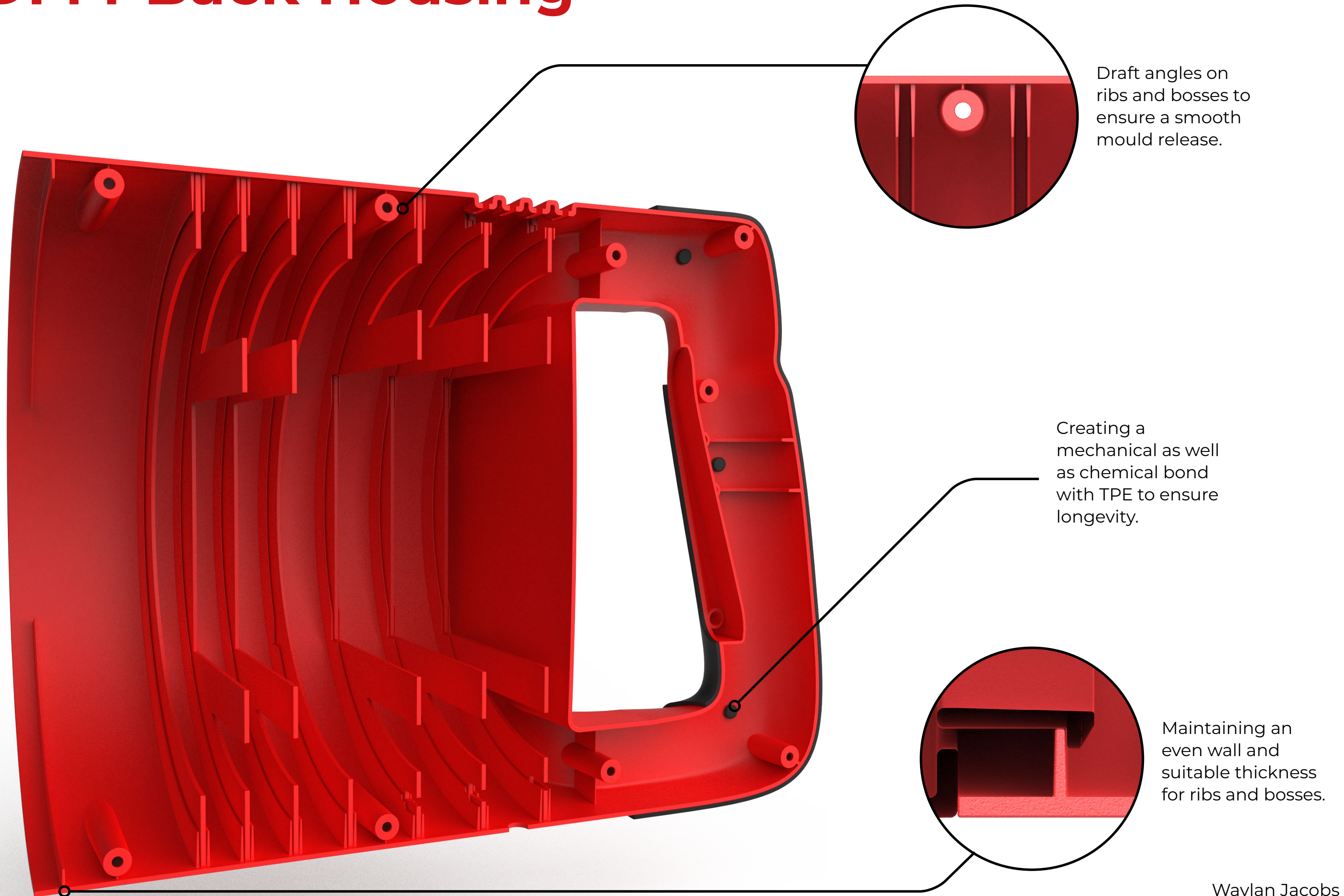
Adding draft and using draft angle analysis to ensure it was correctly achieved.



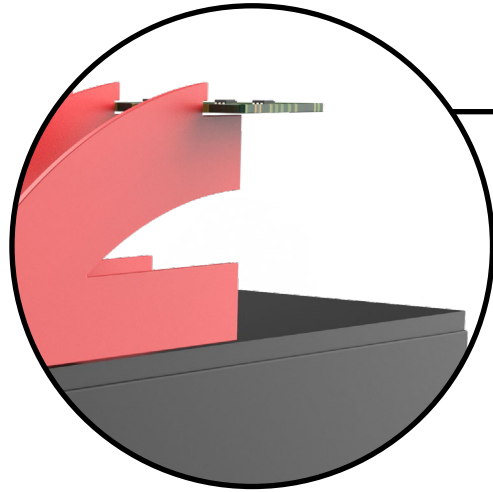
Identifying the direction of the mould halves was important to ensure that the necessary draft angle was used according to the mould pull.



DFM-Back Housing

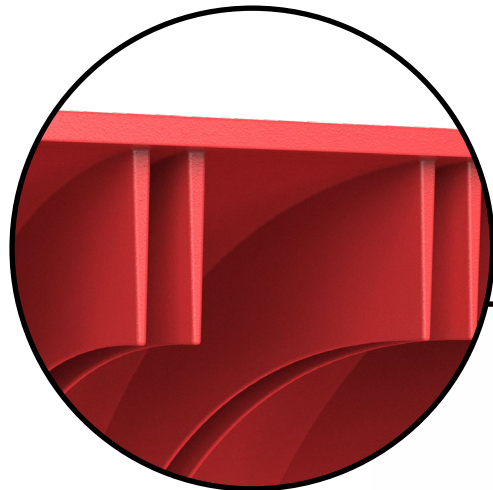


DFM-Back Housing

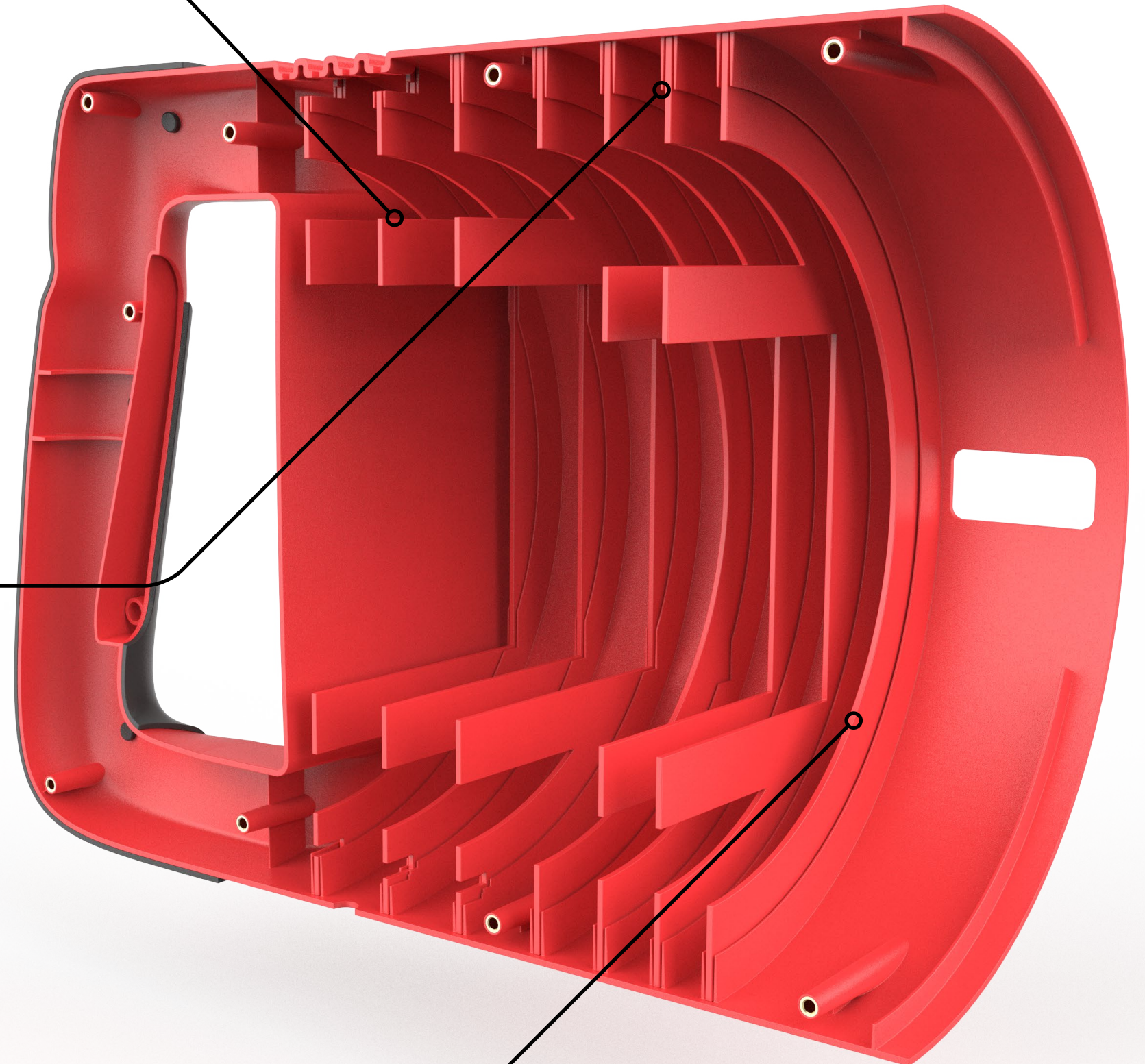
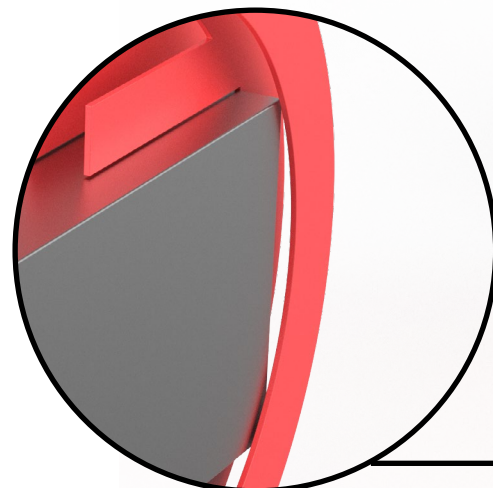


Slats to hold battery, amplifier and PCB's in place as ribs aren't able to be used due to wall thickness after drafting.

Slats will be adhesived in between ribs for a secure fit.

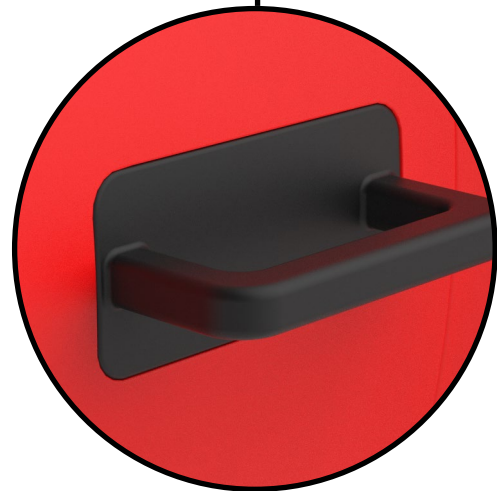
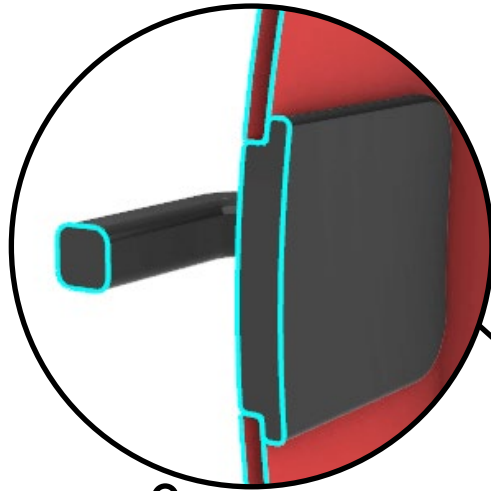


Slats stop components moving back and forth.



DFM-Back Housing

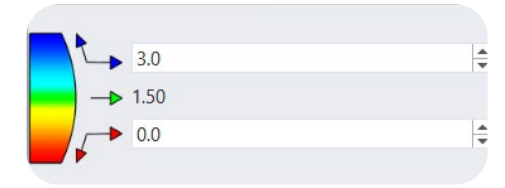
Strengthening snap hook loop by having a lip against inner surface which will be adhesived in.



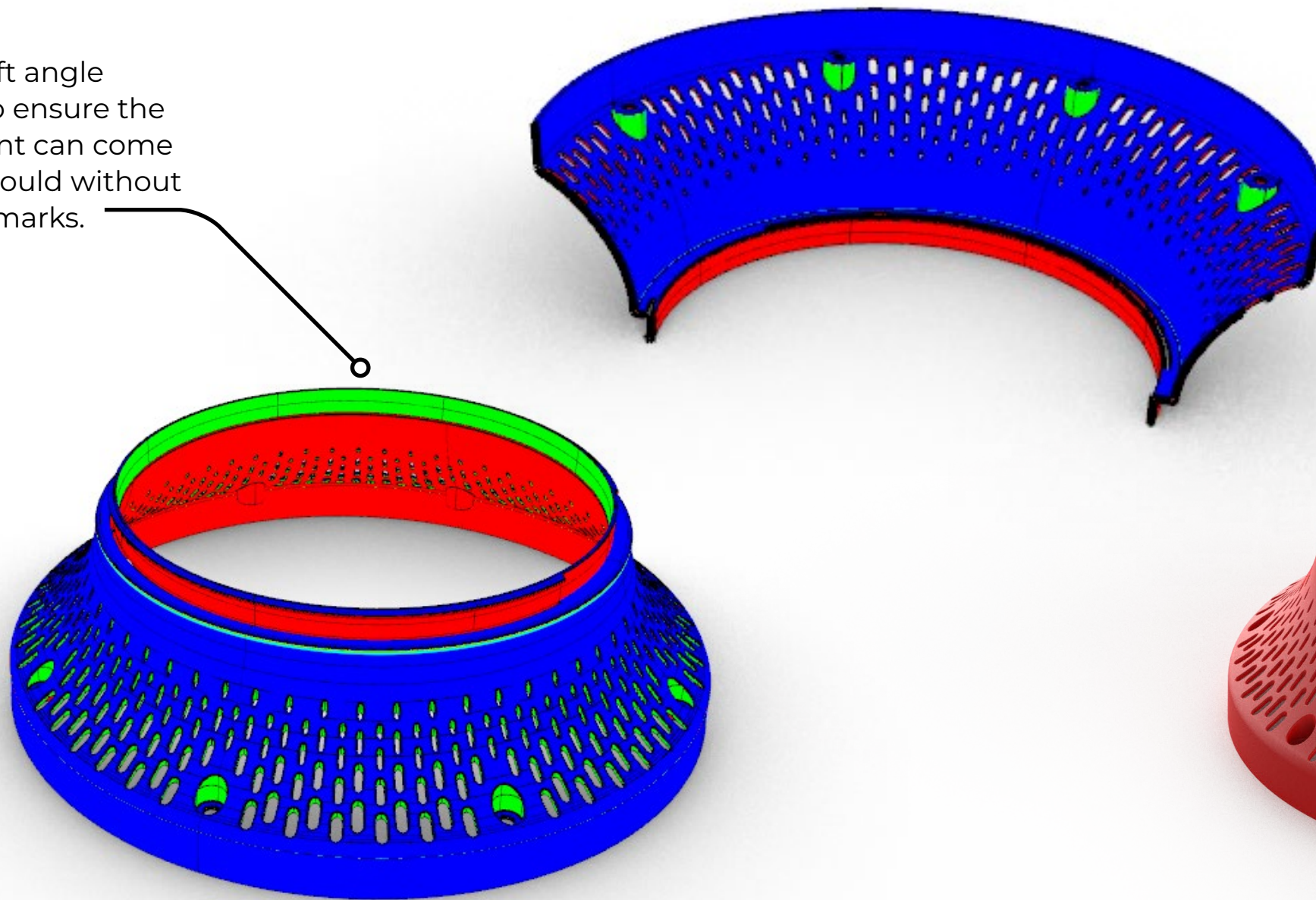
Sits flush with back section to keep a consistent surface.



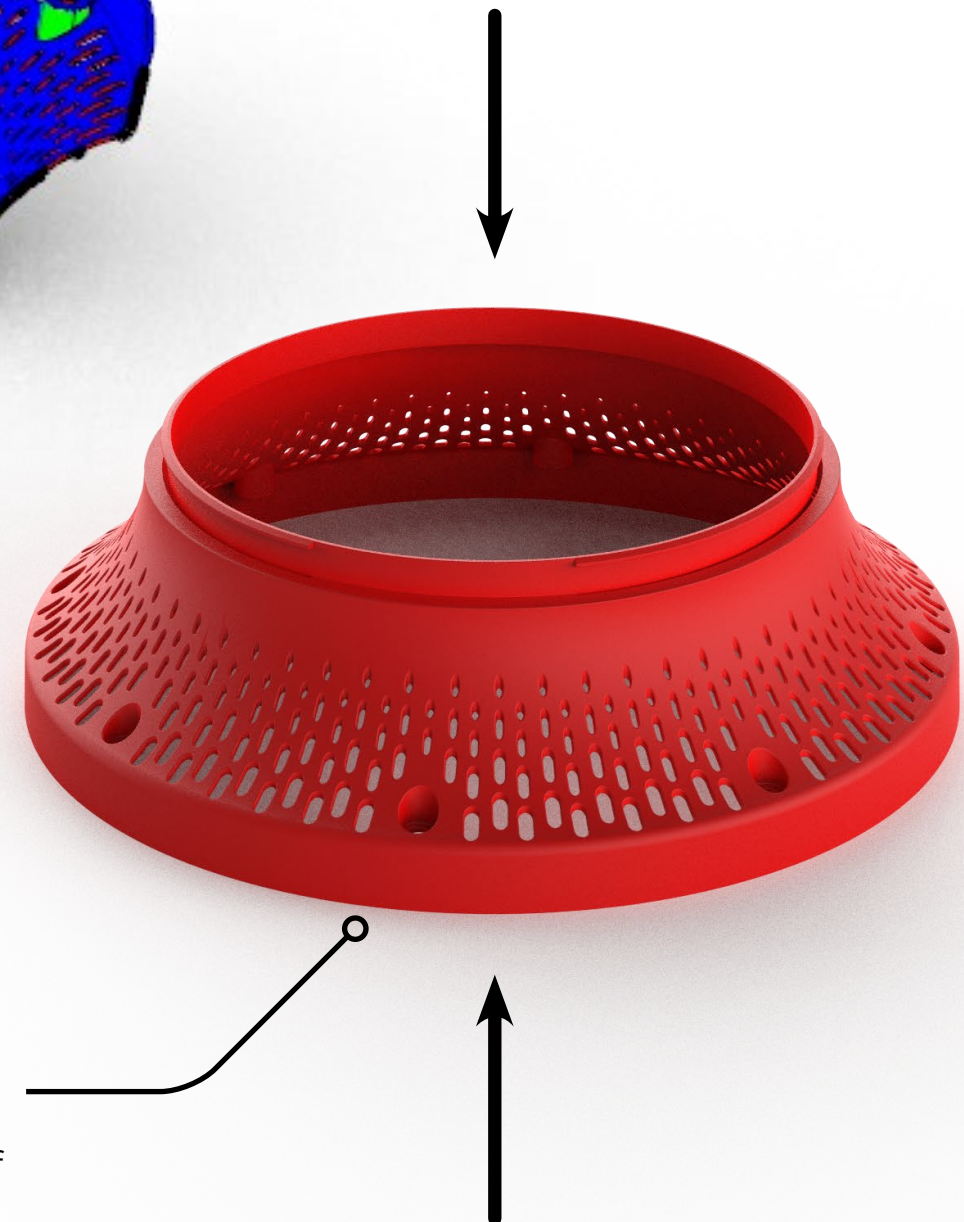
DFM-Venting



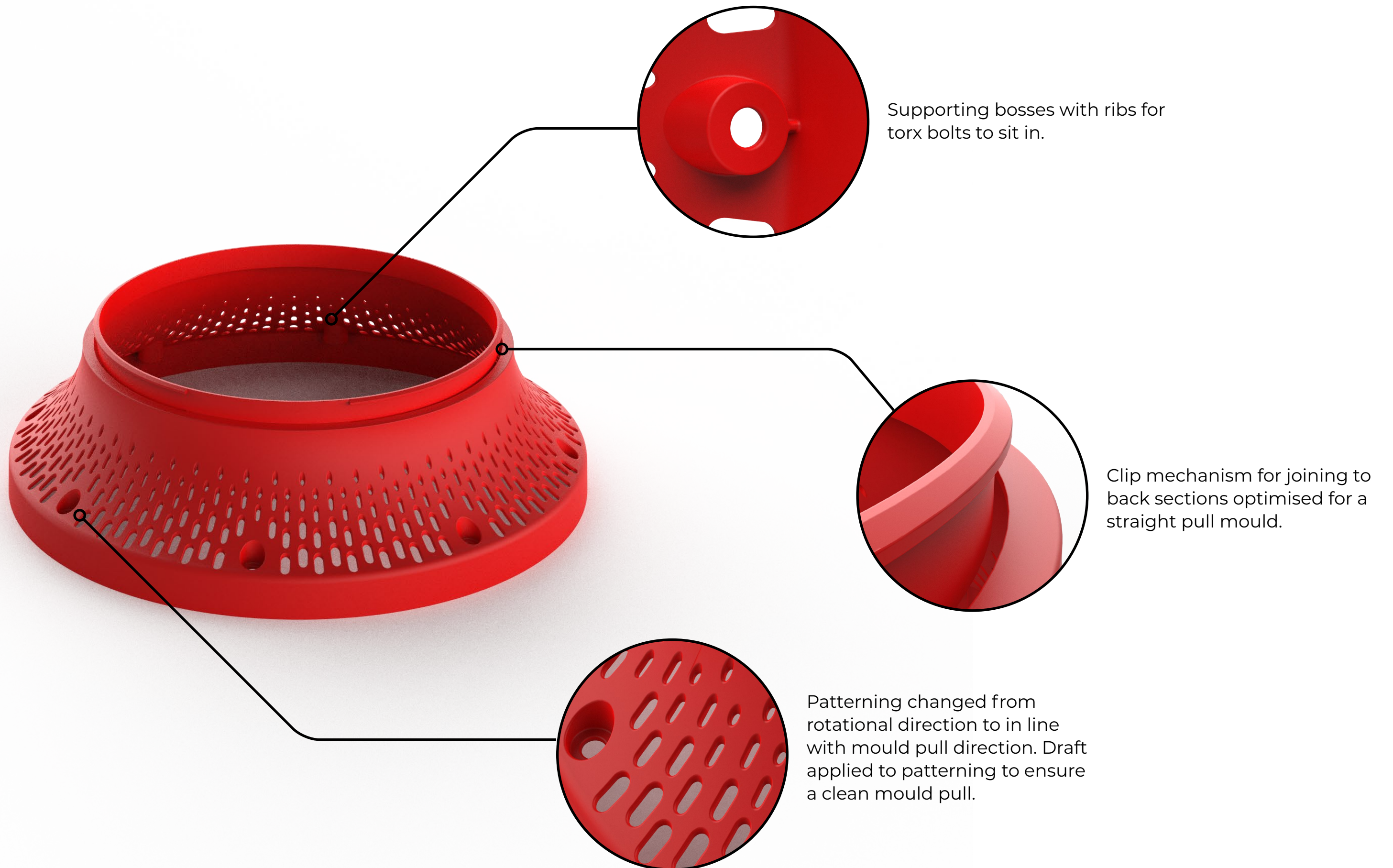
Using draft angle analysis to ensure the component can come out the mould without any drag marks.



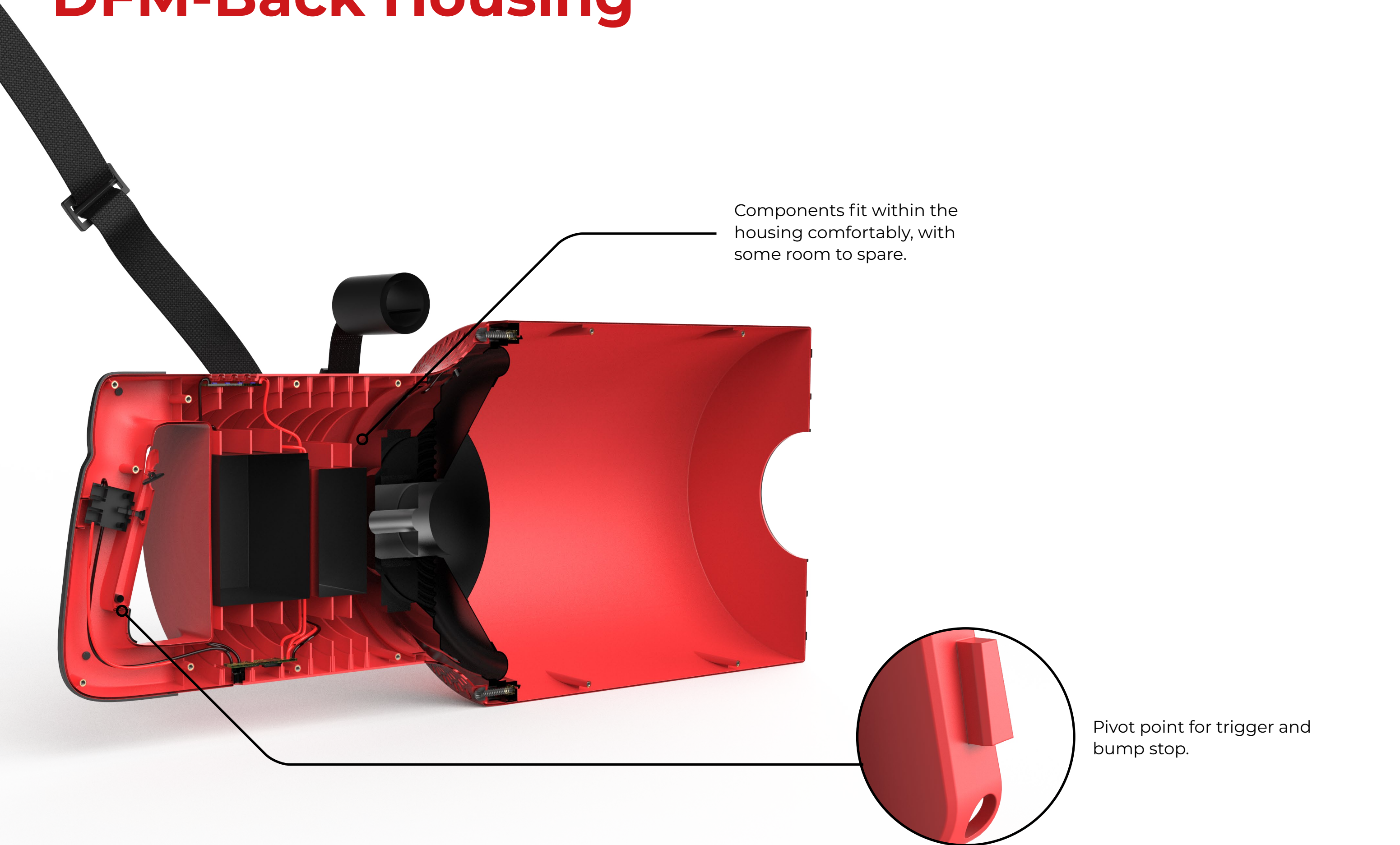
Identifying the mould direction and ensuring that a suitable draft angle is used according to the direction of the mould pull.



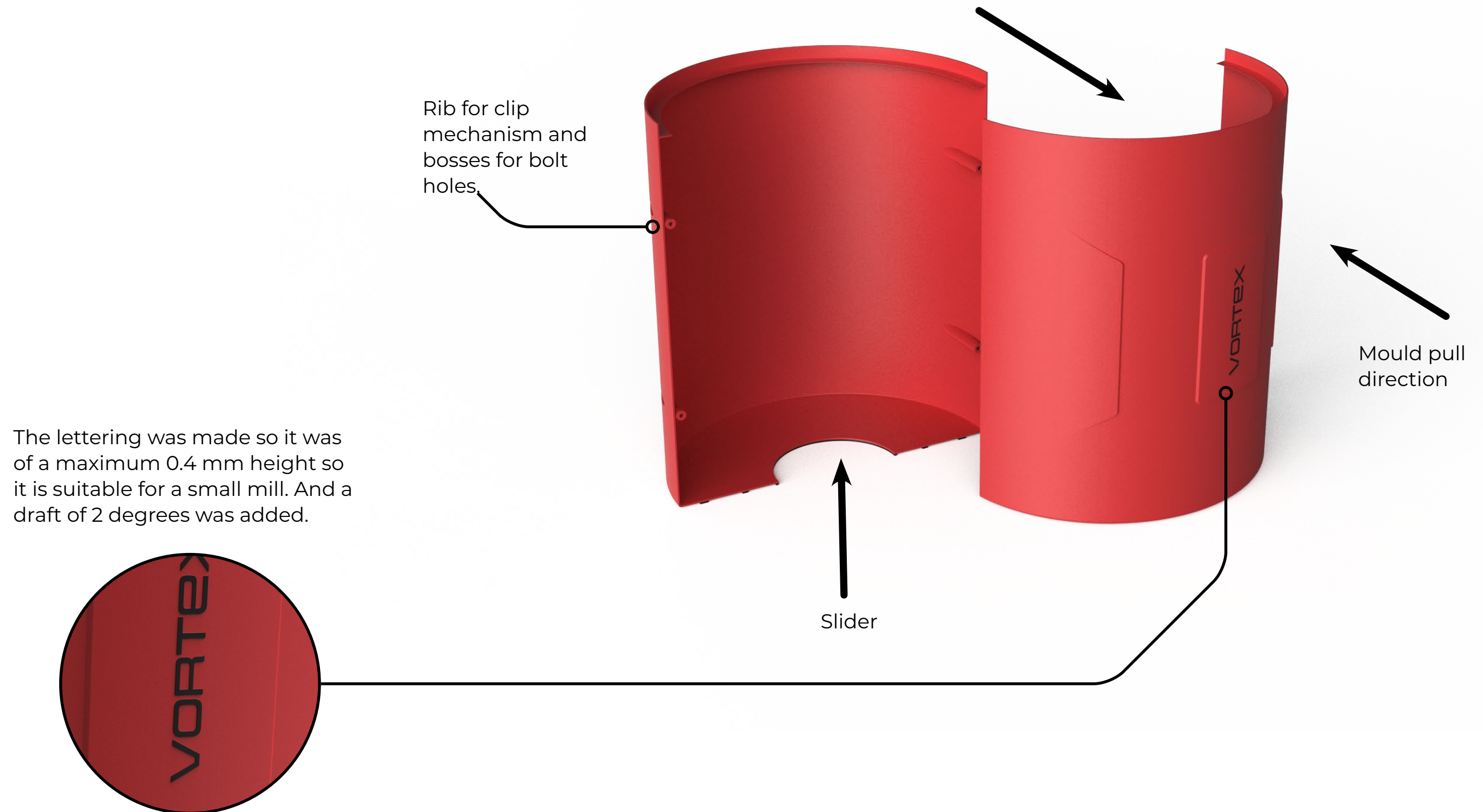
DFM-Venting



DFM-Back Housing

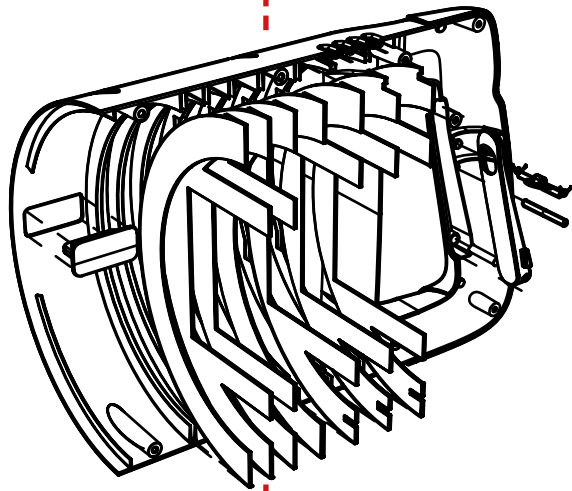


DFM-Front Housing

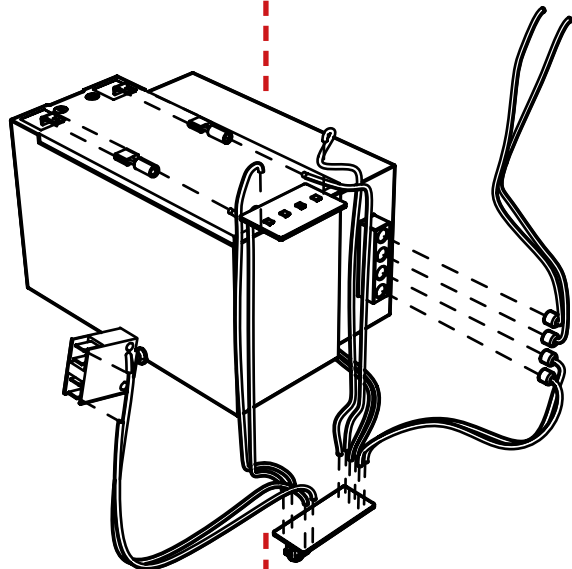


Assembly

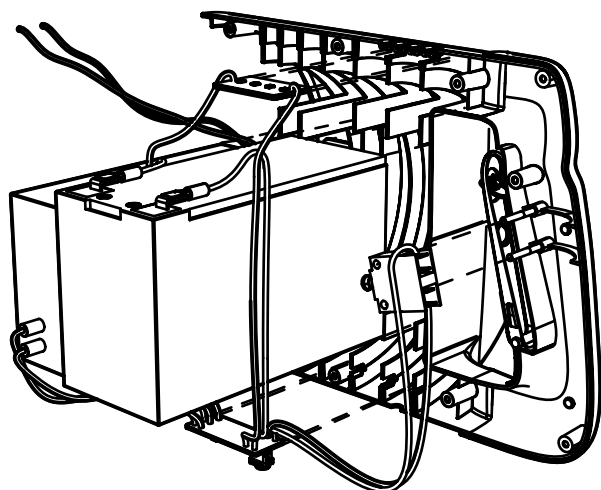
01



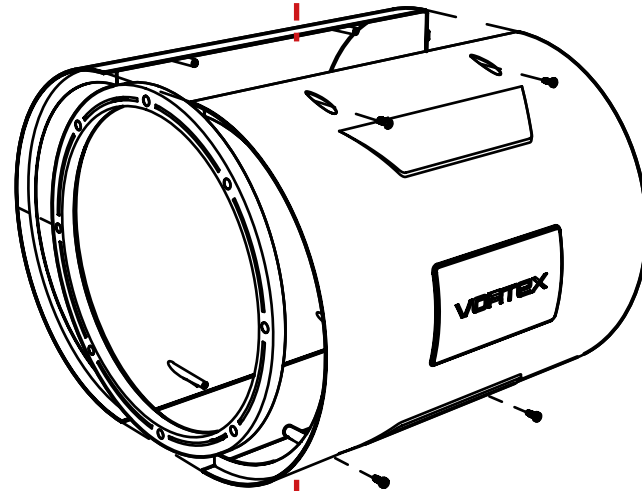
02



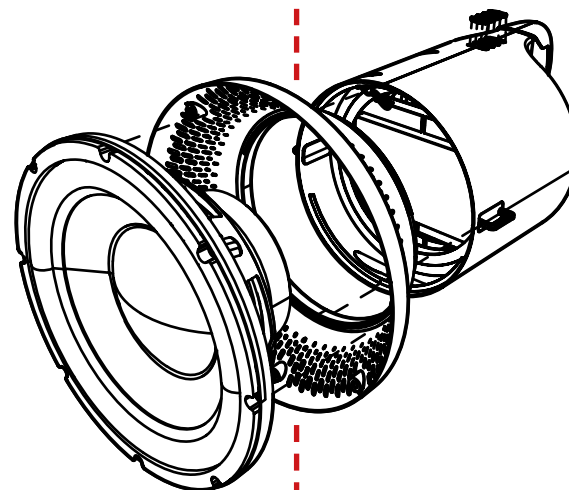
03



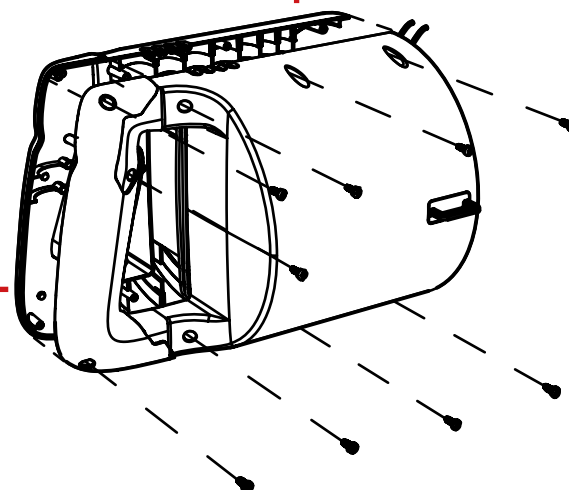
06



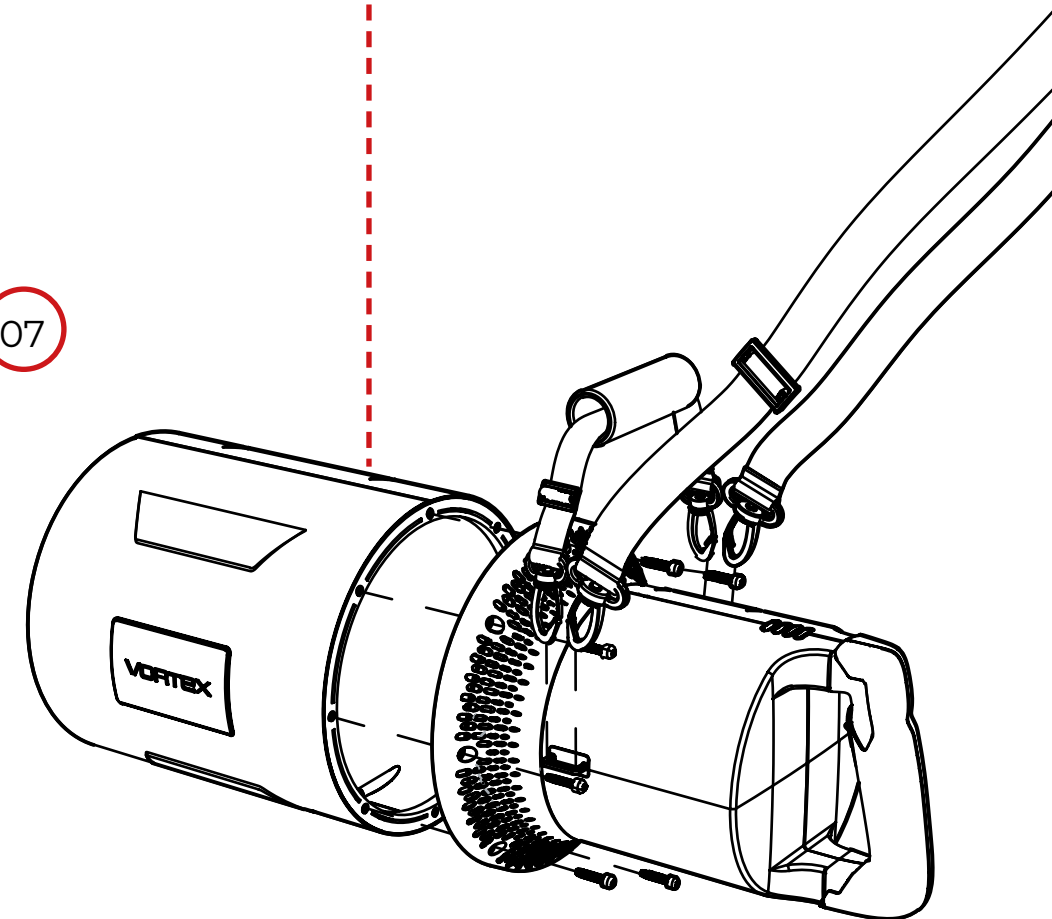
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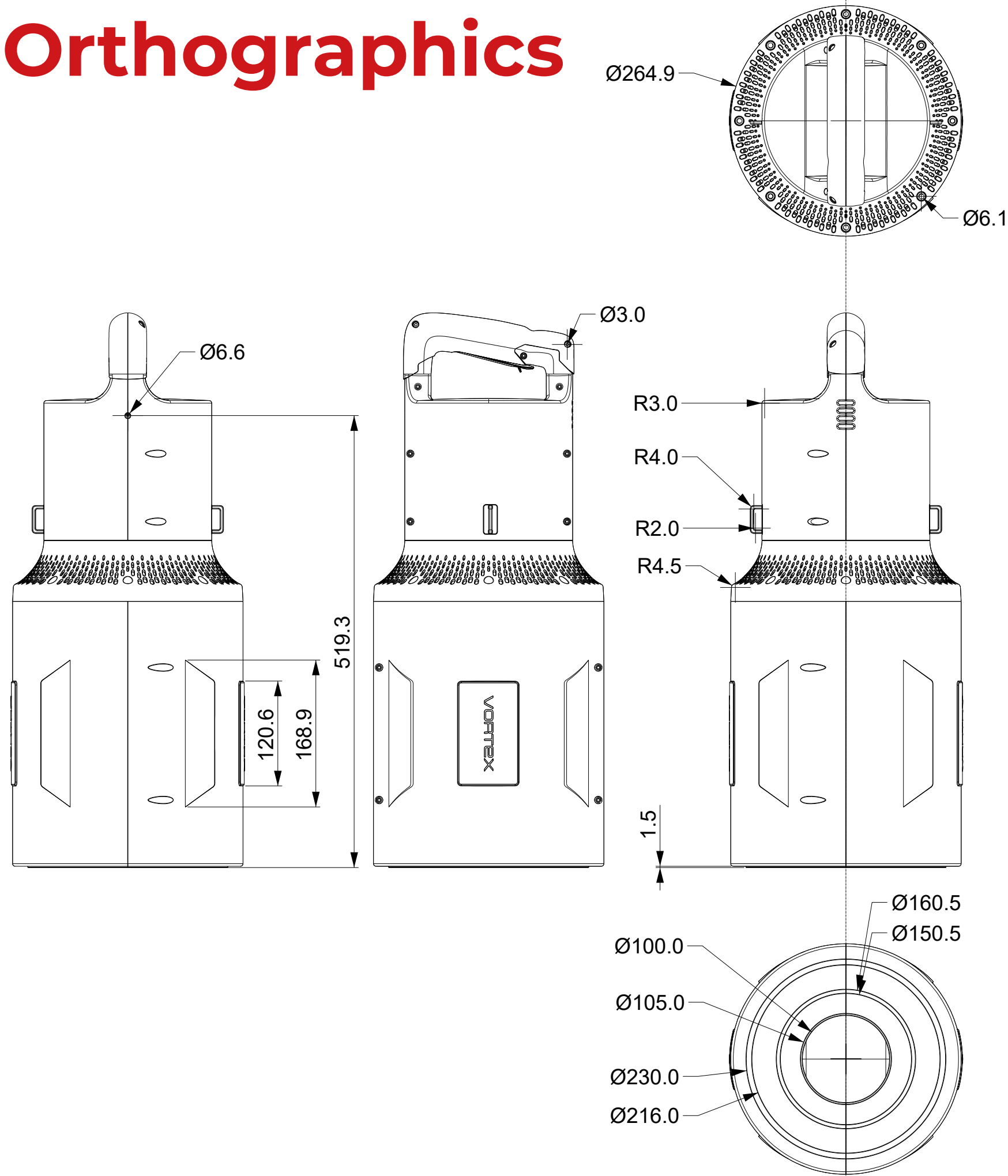
04



07



Orthographics



	Legal Owner Waylan Jacobs		
	Title Vortex Sound Extinguisher		
Third Angle Projection	Doc Type Assembly	Drawing N° WJV001	
	Scale 1 : 5	Sheet N° 1 of 3	Date Produced 19/04/2021