# ECAL-P mechanical frame

## status report on the design

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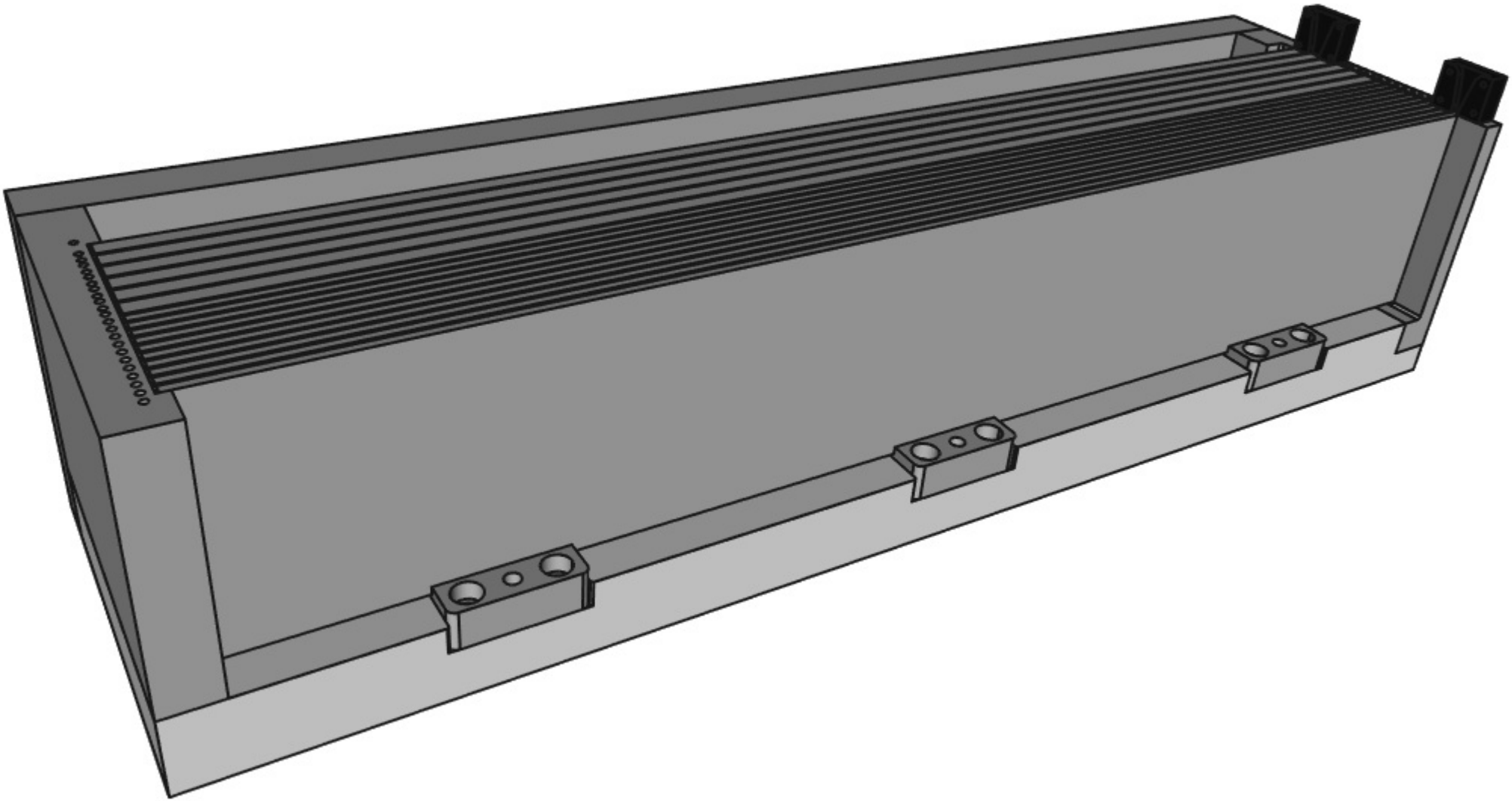

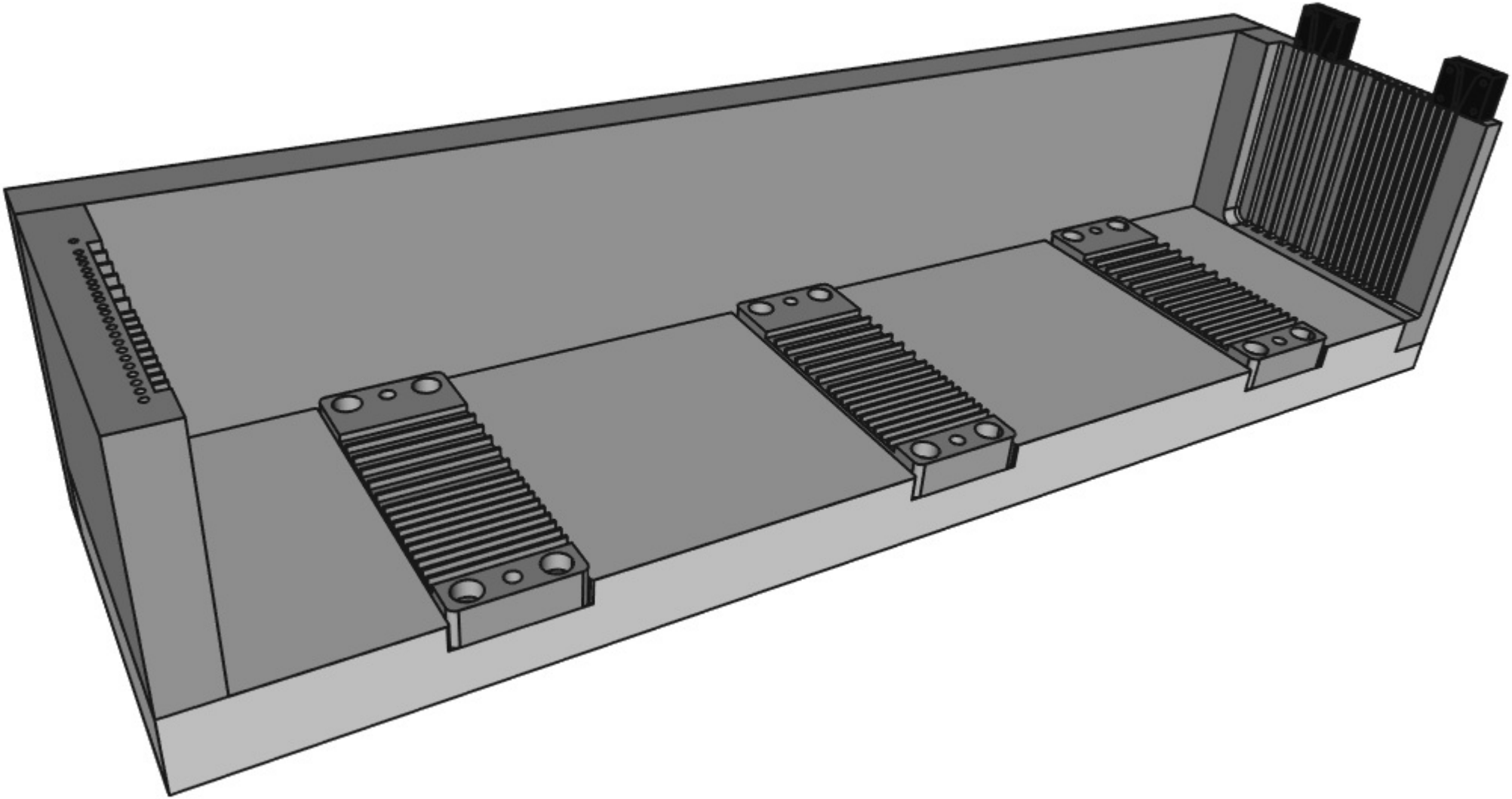

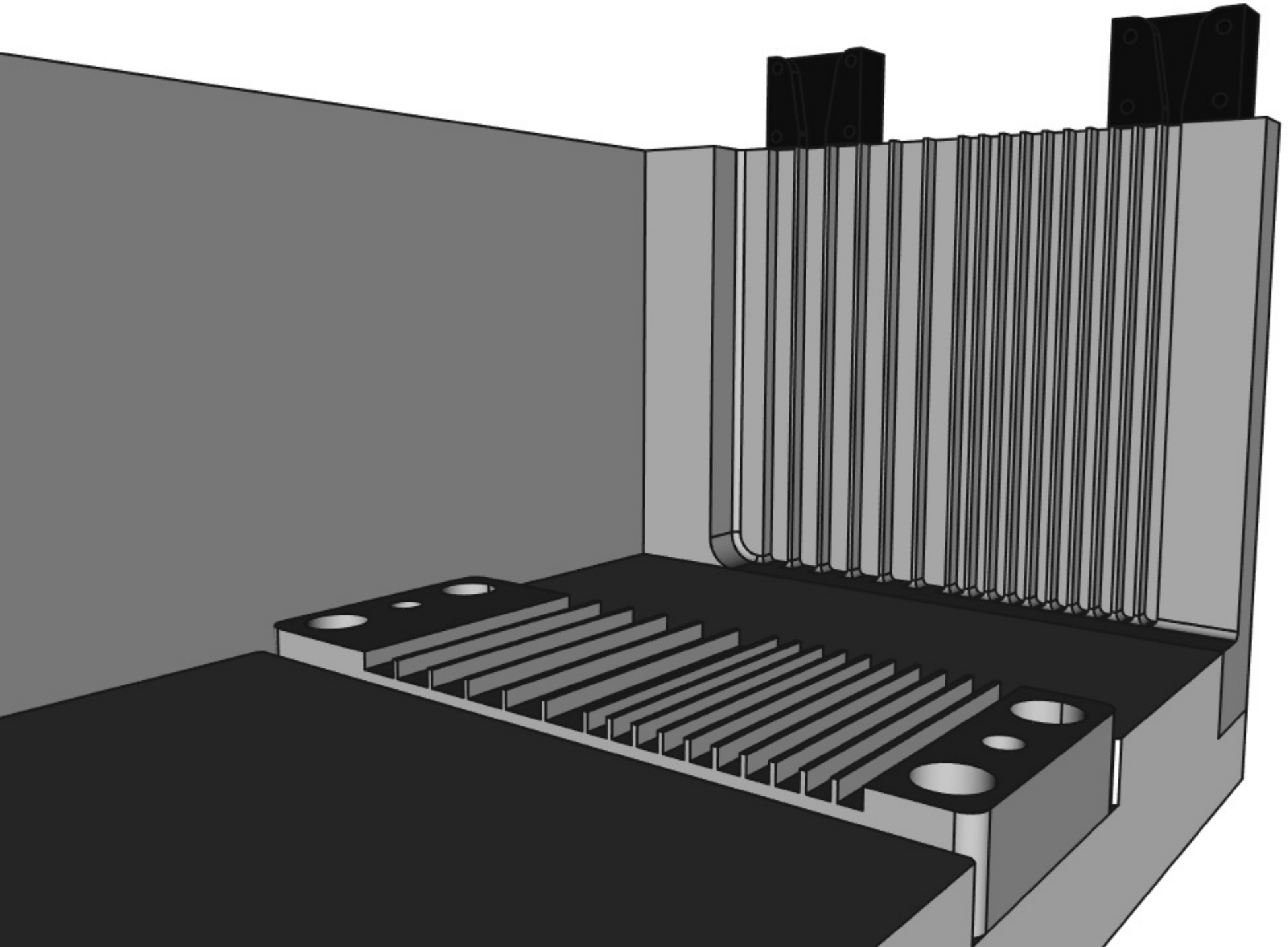

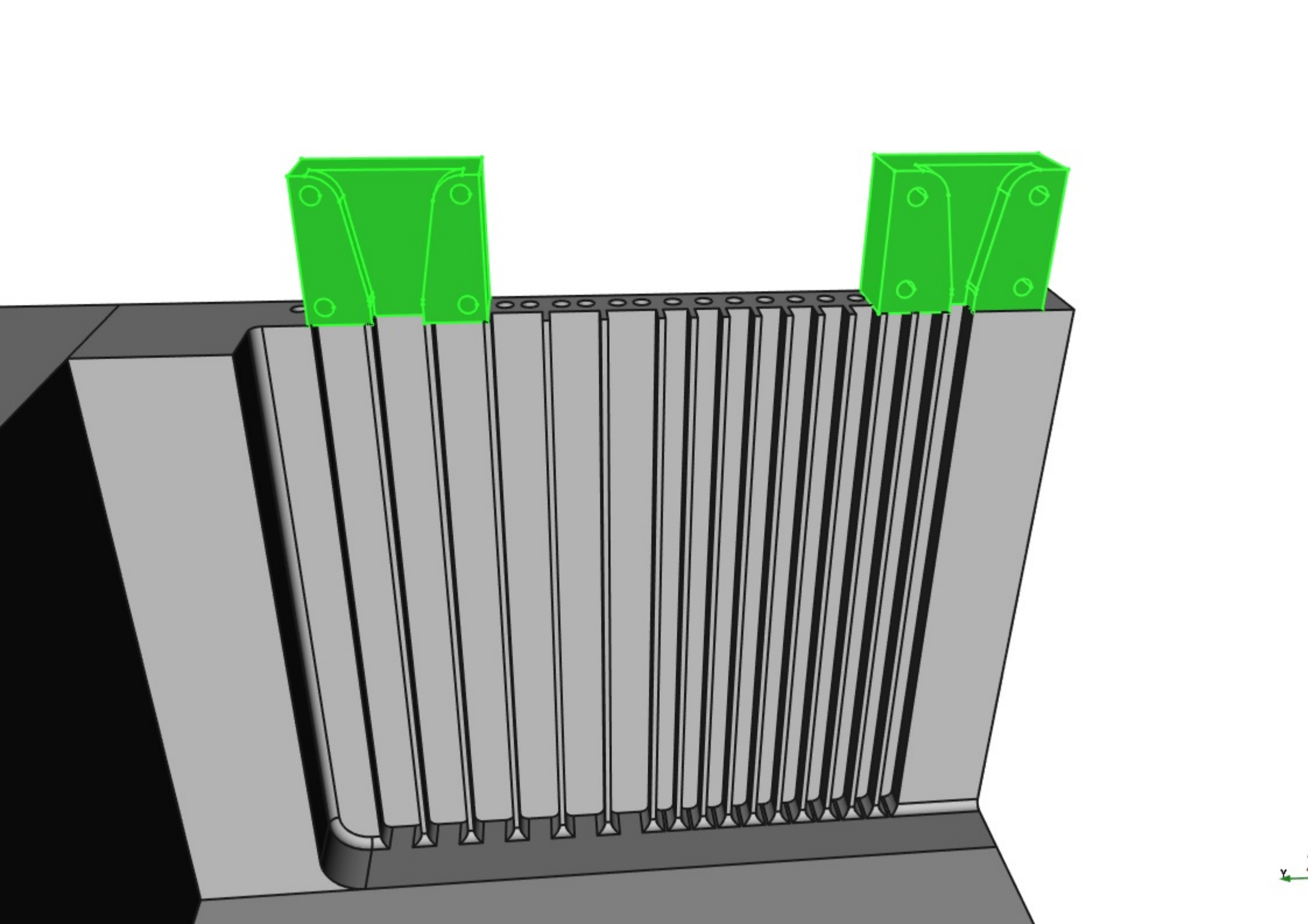

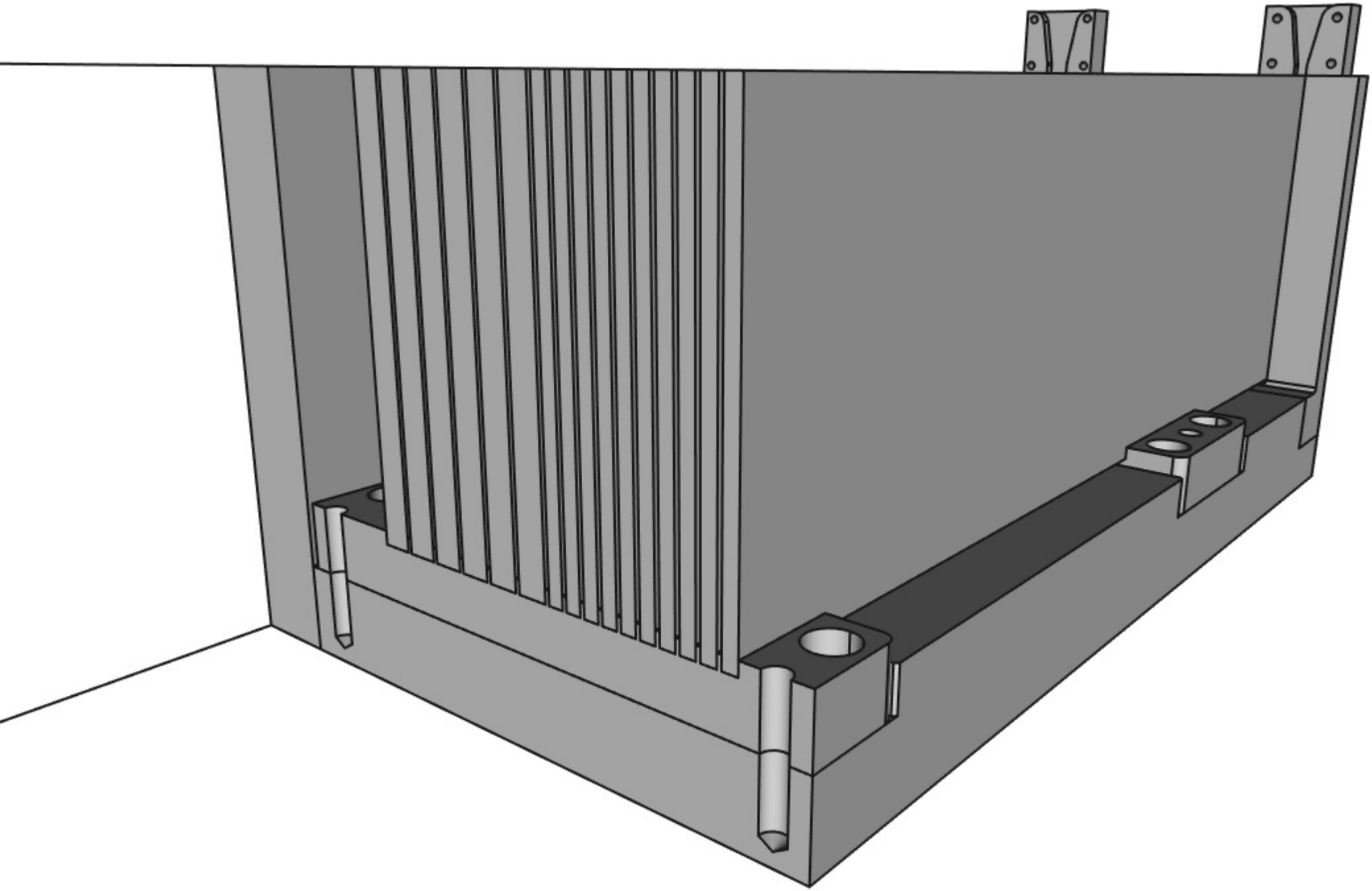

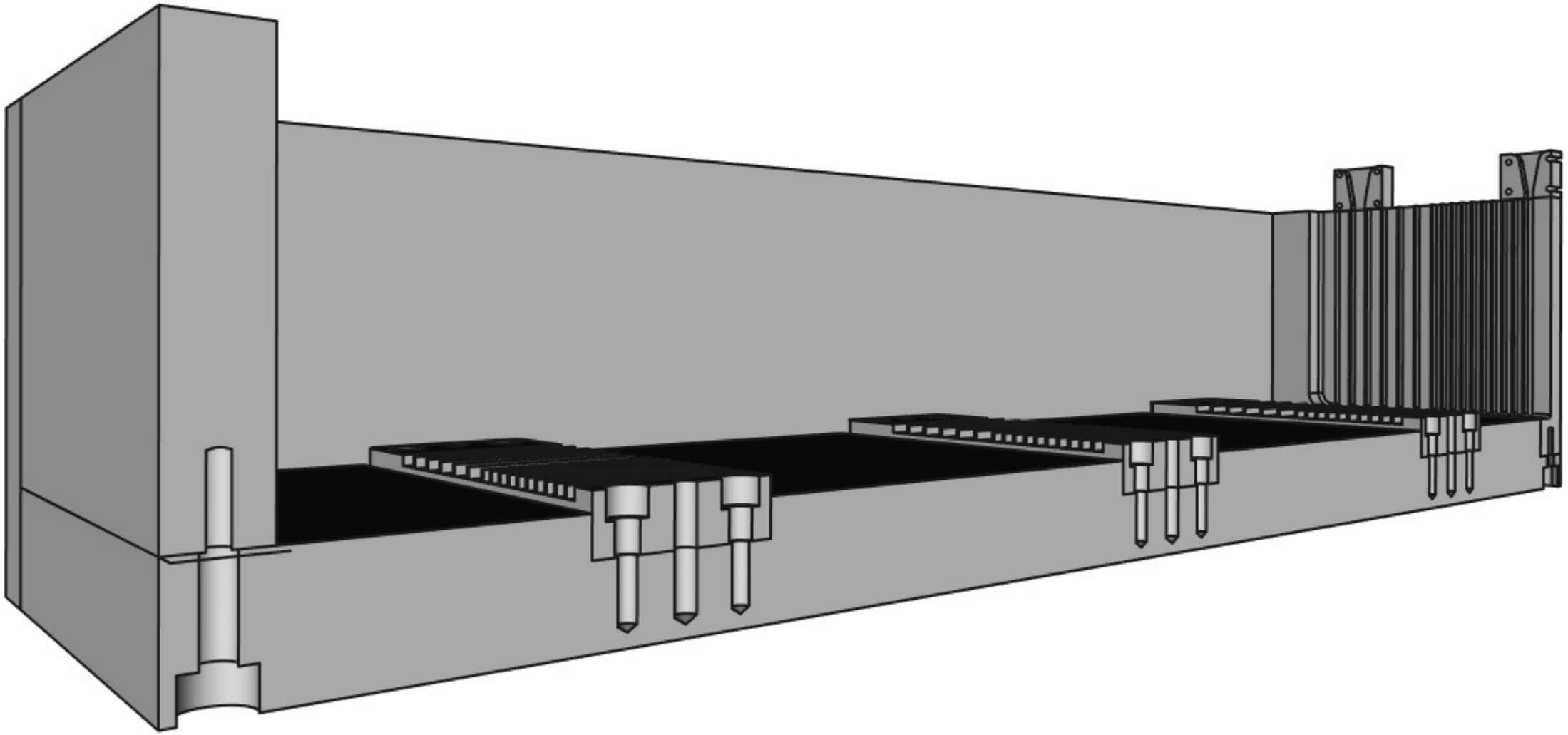

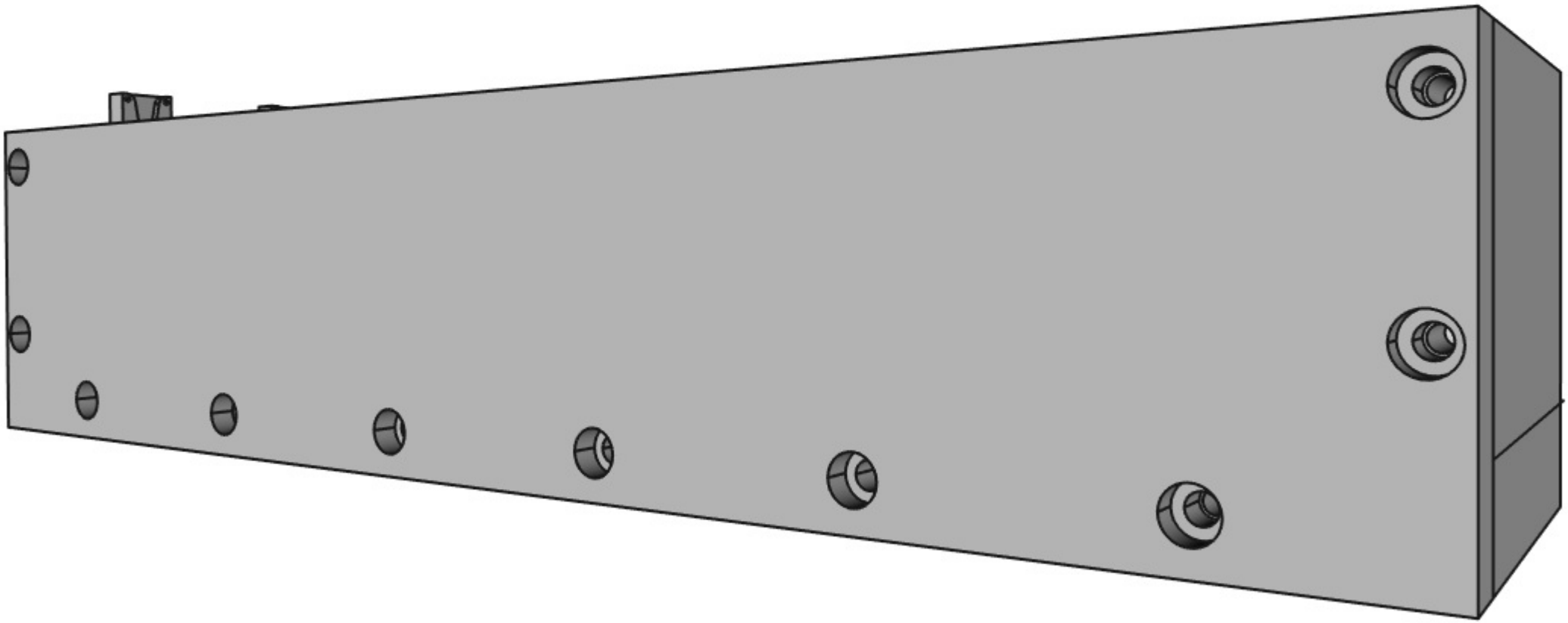

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## Design concept

Proposed approach assumes modular structure of the frame.

Current design includes main frame for tungsten planes only.

Design should probably be extended to include (as independent modules):

- frame for holding PCBs (connected with sensor layers)
- frame support for proper positioning on the table
- additional structures for holding cables, covers etc.
- mechanical arm for lowering PCBs with sensor planes in the structure

But many details required for their design are still missing...

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### Sensor plane frame

We assume sensor planes supported by kapton foils connected to PCBs.

But details are missing:

⇒ Final structure (dimensions) of the sensor planes (+ envelope, if needed)

⇒ How sensor planes are connected to PCBs.

⇒ PCB design: dimensions and how to securely fixed them to the frame

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### Frame support

It should probably allow for adjusting frame position.

⇒ How many degrees of freedom should we consider?

⇒ What is the required range and precision?

⇒ Is there any dedicated interface to the experimental table considered?