

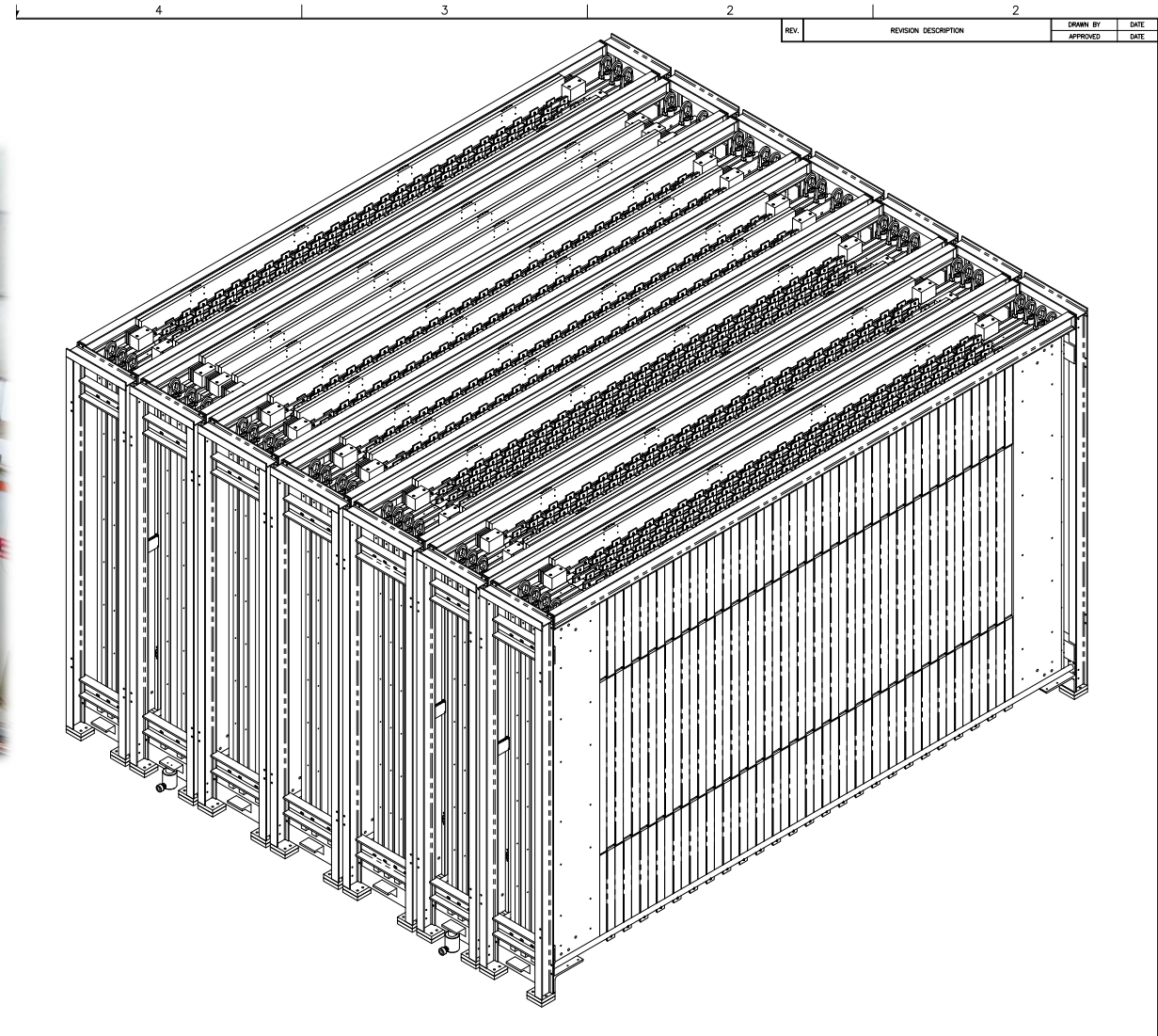
BabyMIND geometry for FPF/FLArE

Matteo Vicenzi, Larry Bartoszek

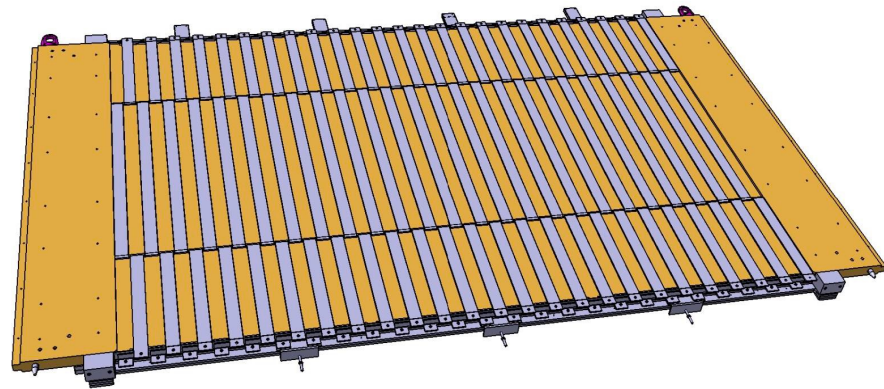
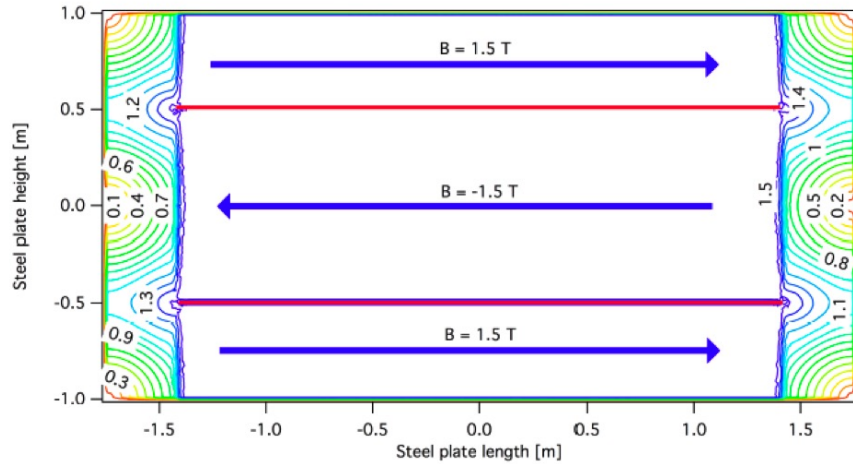
BabyMIND



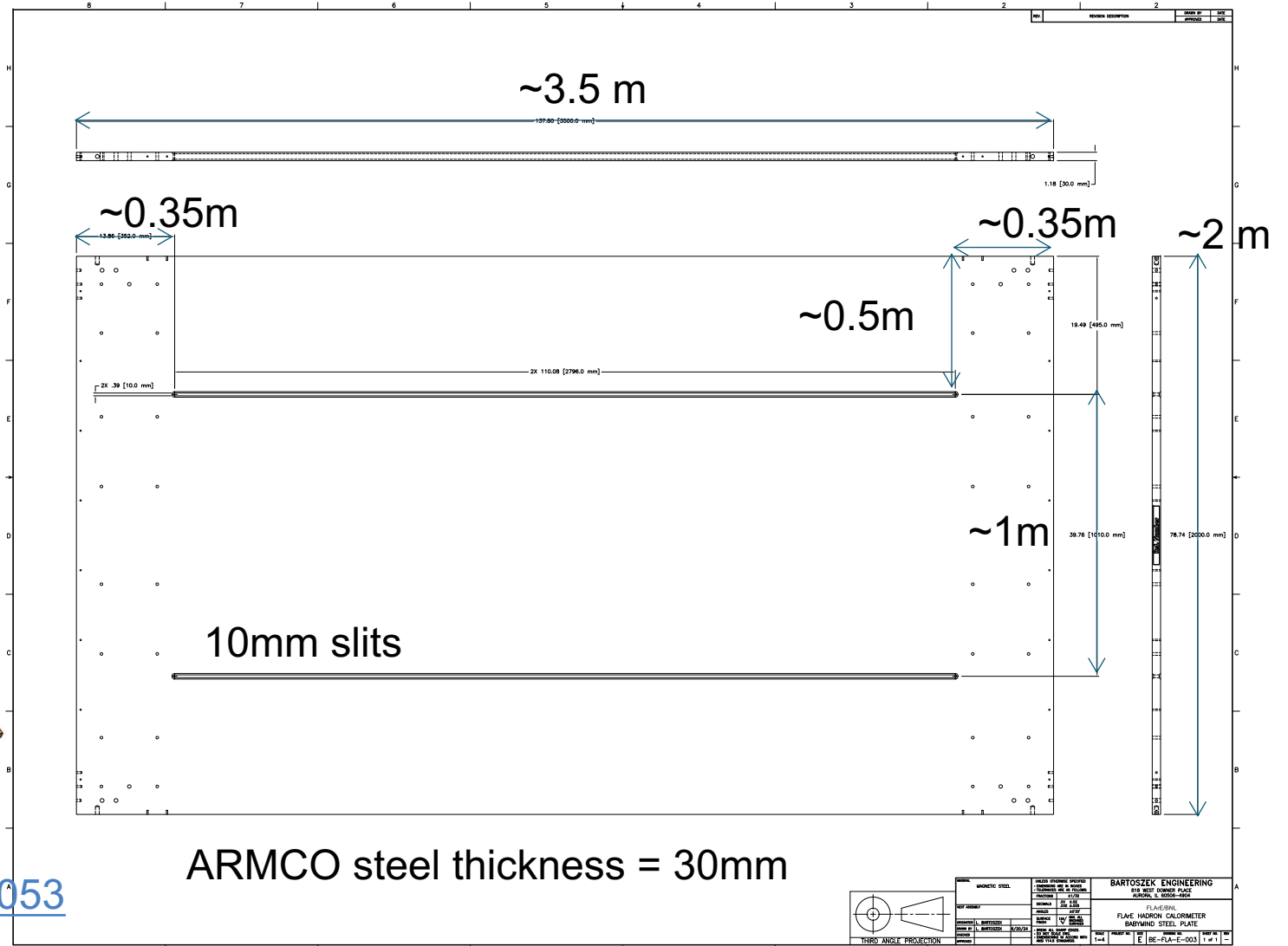
BabyMIND in T9 area



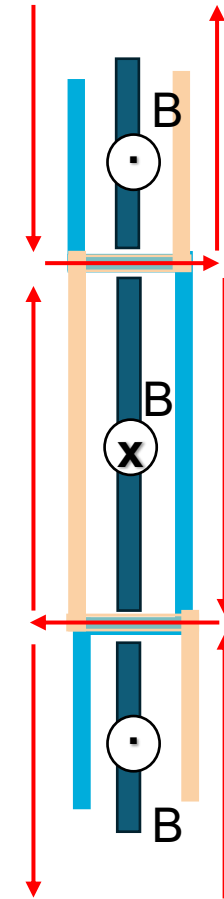
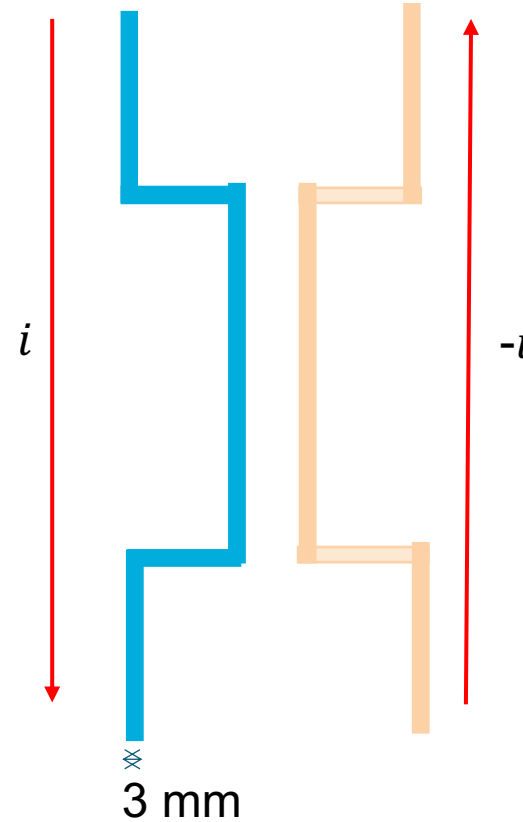
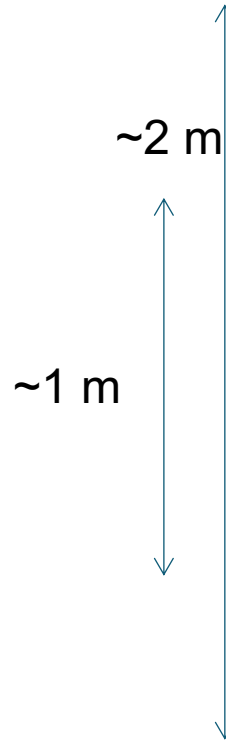
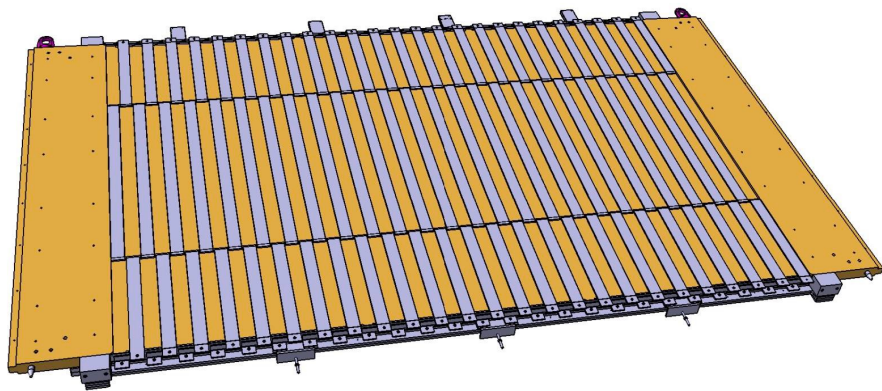
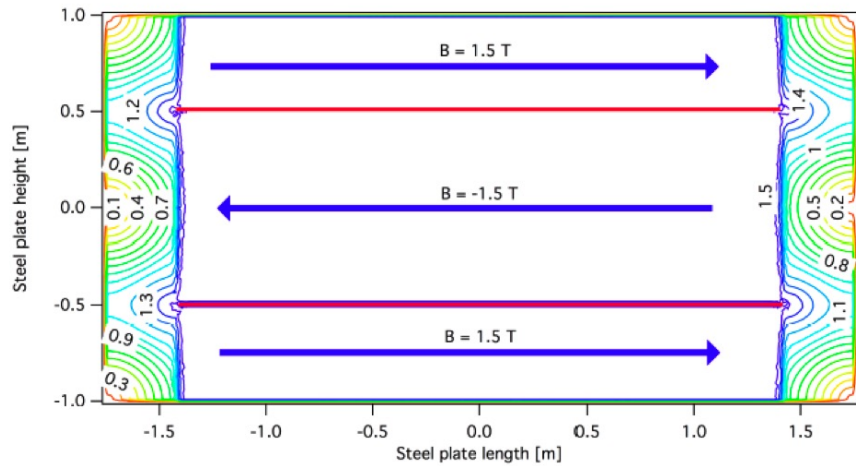
Magnet module: ARMCO plate



<https://doi.org/10.1109/TMAG.2017.2664053>



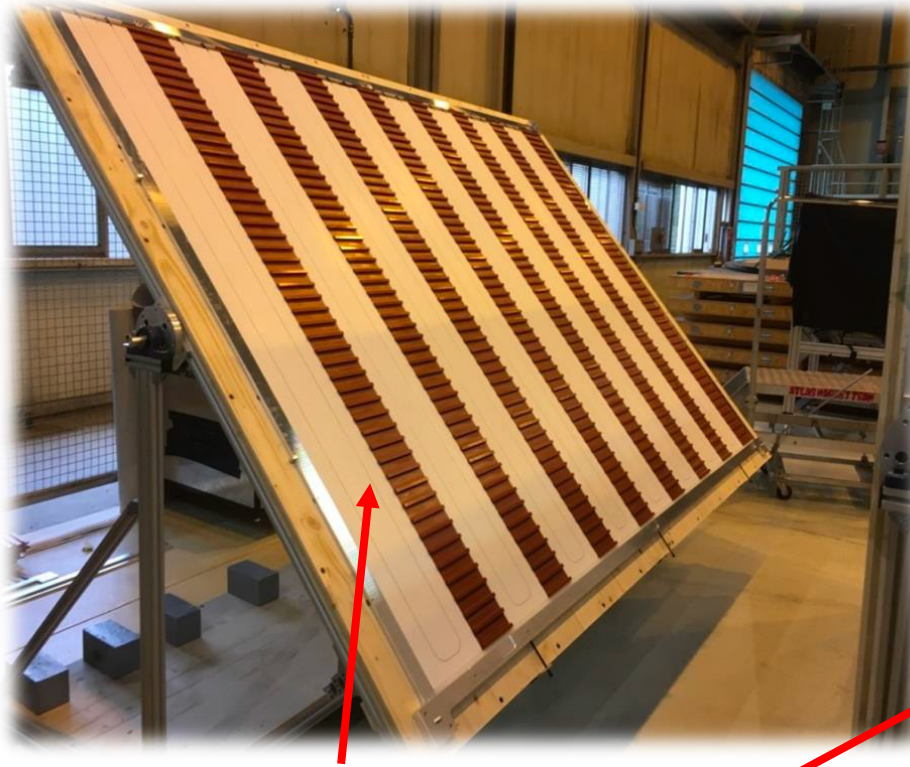
Magnet module: electrodes



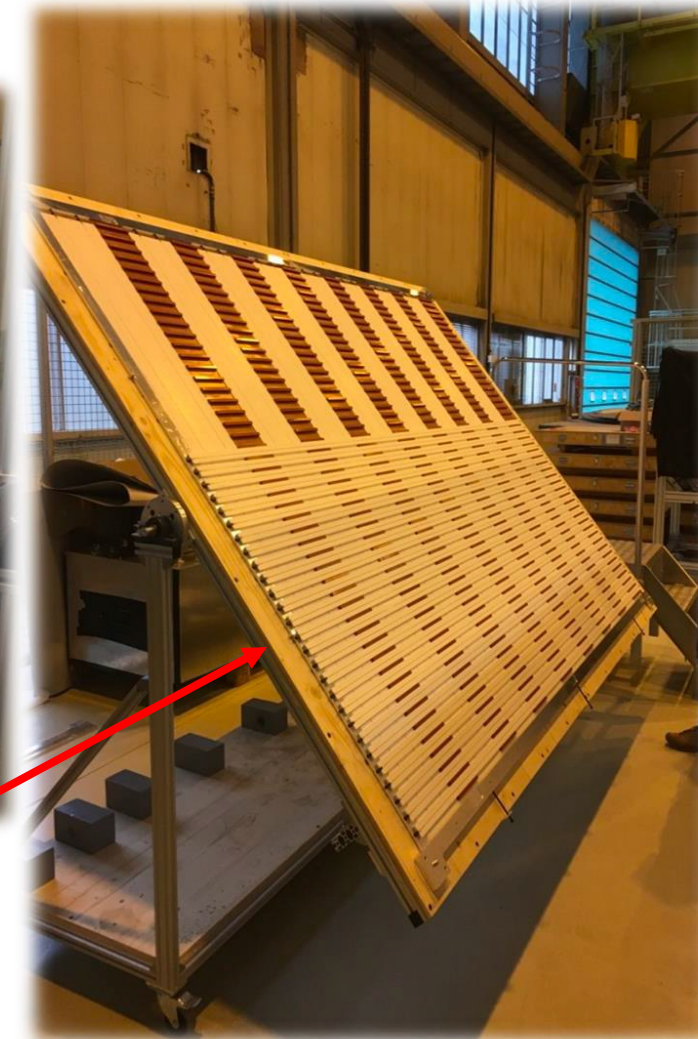
Aluminum "ribbon" strip:
Thickness = 3 mm
Width = 50 mm (25 turns x coil)

<https://doi.org/10.1109/TMAG.2017.2664053>

Detector module

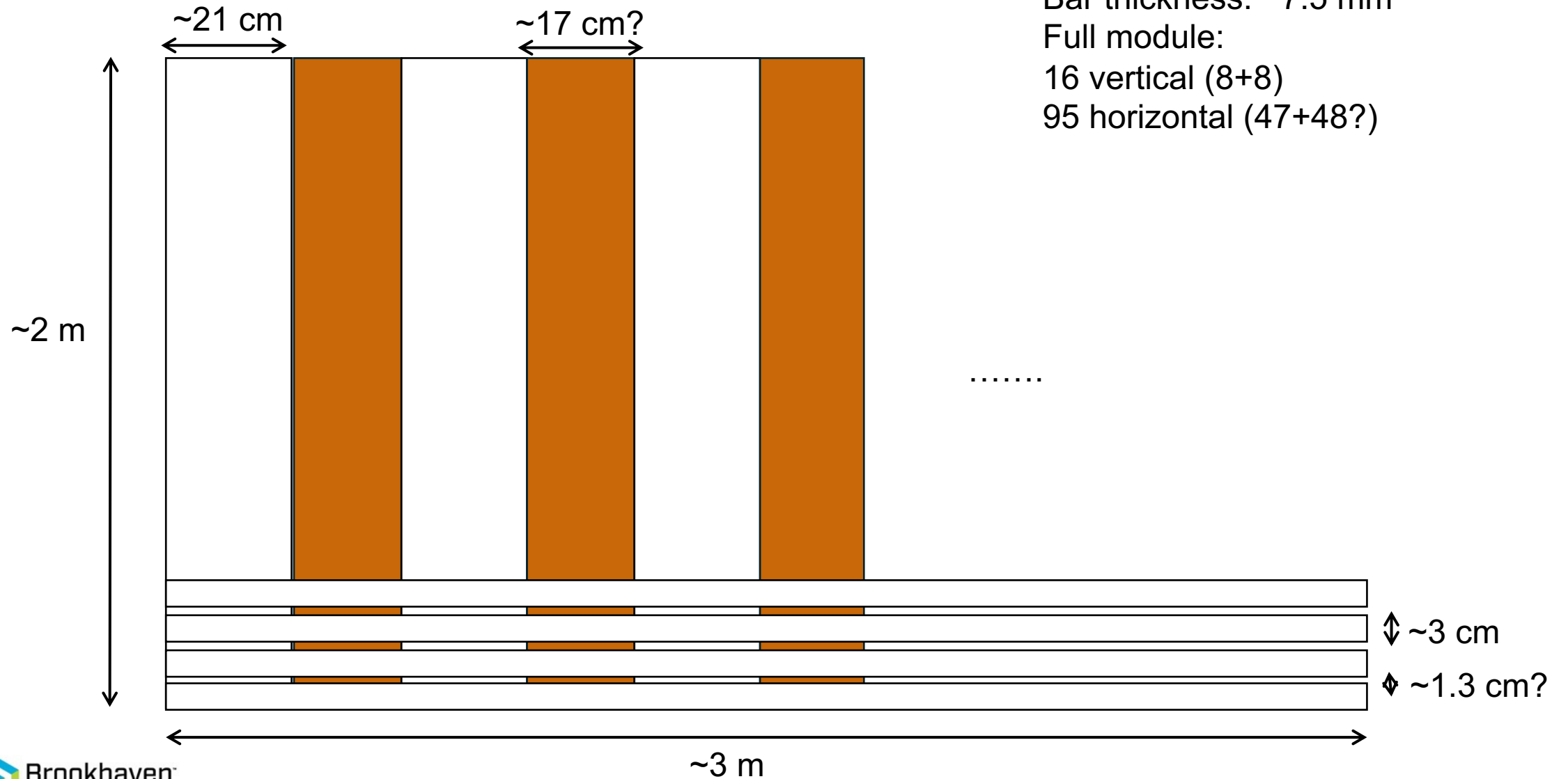


Spacers for the vertical bars also support the horizontal bars

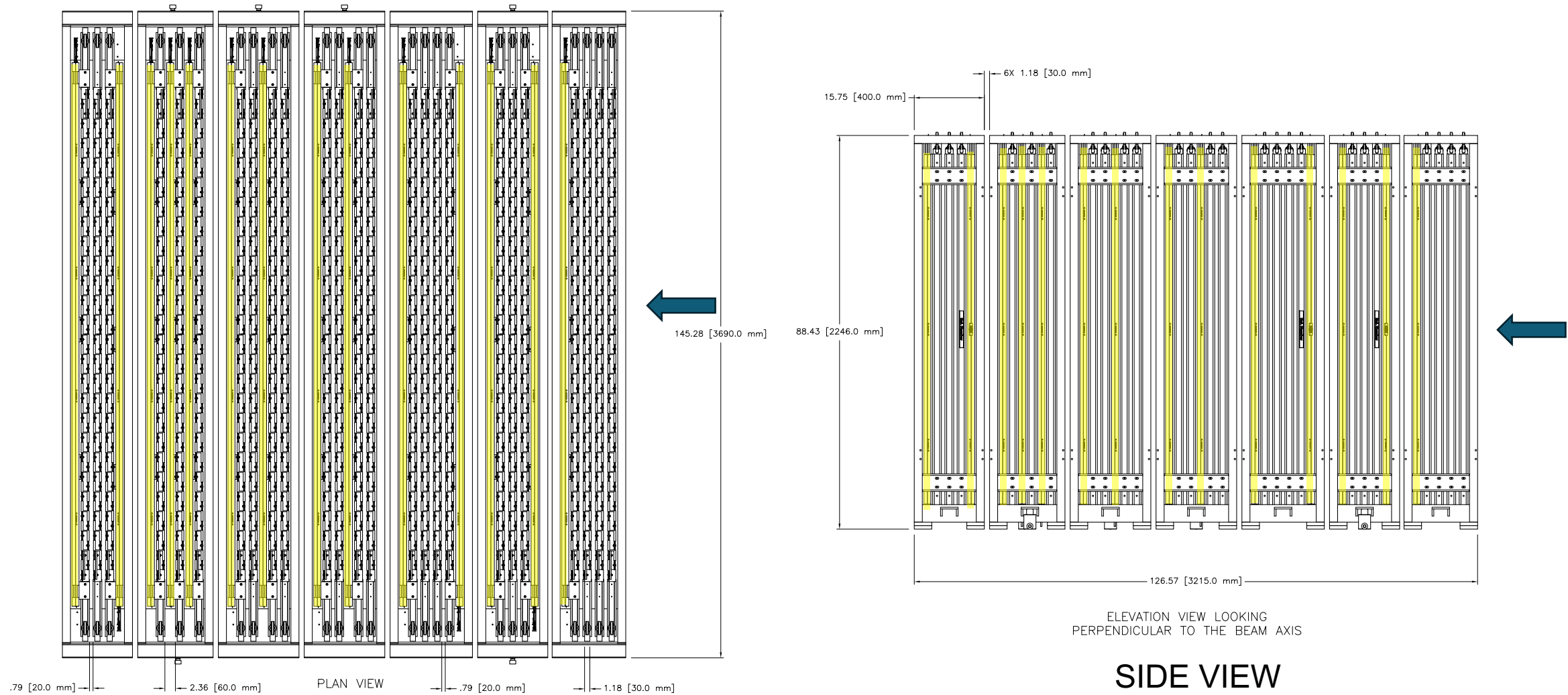


Bars are staggered in the second half to cover the gaps in the first half.

Detector module



Full assembly



TOP VIEW

SIDE VIEW

Readout

Channels per module:

- 16 vertical bars x 2 = 32
- 95 horizontal bars x 2 = 190
- TOTAL = 222 channels

Current assembly:

- 14 detector modules
- 3108 channels

