

MDT Chamber - Sign Convention

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The following outlines the **official CERN MDT** sign convention as defined in the **Parameter Book** and **MDT End Cap Detector** drawings referenced.

Ref: ATLM____ 0005 Layout EI Chambers
ATLM____ 0003 Layout EM Chambers

Side A, Side C

EIL, EML chambers:

- Thin flange (or notch) on SF is away from the IP.
- ML-1 is on the side facing the IP.
- ML-2 is on the side away from the IP.
- Tube Layer #1 faces the IP for both ML-1 and ML-2.

EIS, EMS chambers:

- Thin flange (or notch) on the SF is toward the IP.
- ML-1 is on the side facing the IP.
- ML-2 is on the side away from the IP.
- Tube Layer #1 faces the IP for both ML-1 and ML-2.

The **PMO** is located between the small and large chambers:

- Small Chambers (EIS, EMS) the PMO is mounted on the top layer of ML-2, the ML away from the IP.
- Large chambers (EIL, EML) the PMO is mounted on top layer of ML-1, the ML closest to the IP.

Side A Chambers - Looking toward the IP along **-Z** (small end of trapezoid down) :

- Small chambers EIS, EMS: the thin flange (or notch) faces the IP and the RO side is on the **right** side of the chamber, HV on the **left** side.
- Large chambers EIL, EML: the thin flange (or notch) is away from the IP and the RO side is on the **left** side of the chamber, HV to the **right** side.

Side C Chambers - Looking toward the IP along **+Z** (small end of trapezoid down) :

- Small chambers EIS, EMS: the SF thin flange (or notch) faces the IP and the RO side is on the **left** side of the chamber, HV on the **right** side.
- Large chambers EIL, EML: the SF thin flange (or notch) is away from the IP and the RO side is on the **right** side of the chamber, HV on the **left** side.