

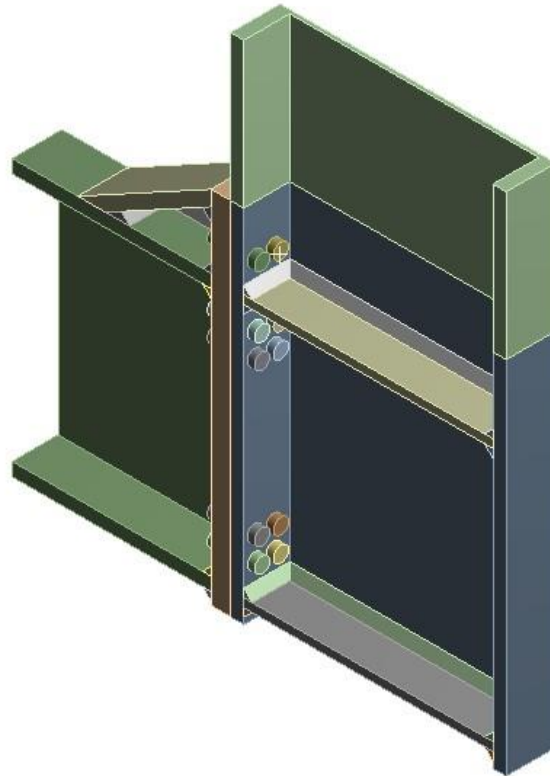
Connections

PH-DT Engineering Office, CERN

CERN, May 2015

Bottom Moment Connection

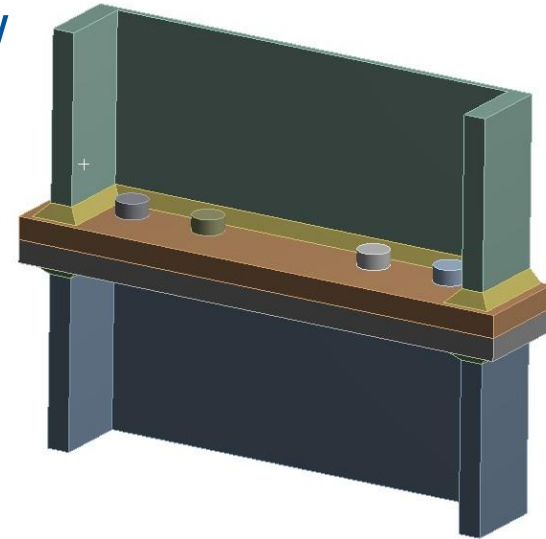
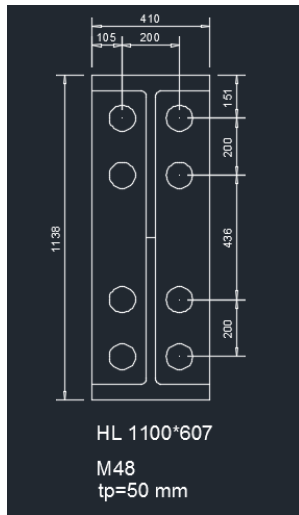
- Not possible to use 4xM48 bolts per row due to space constraints
 - Problems even reduction bolt size to M36, there is no space for the tool



- Possible solution: 2xM52 bolts per row (approximately the same cross section area than 4xM36 bolts, which allows for $\sim 5.3\text{MNm}$)

Splice Connection

- Combination of two splice connections and a pre-manufactured moment connection at the bottom
- Splice connection: 2xM48 bolts per row



- Positions of the splice connections to be carefully chosen to minimise the moment that they need to withstand (parametric study underway for risk assessment).

Splice Connection

- Problem: Size of the pre-manufactured moment connection could be incompatible with elevator size.

