TRD – 2D installation proposal

Bucharest-TRD group

www.ifin.ro

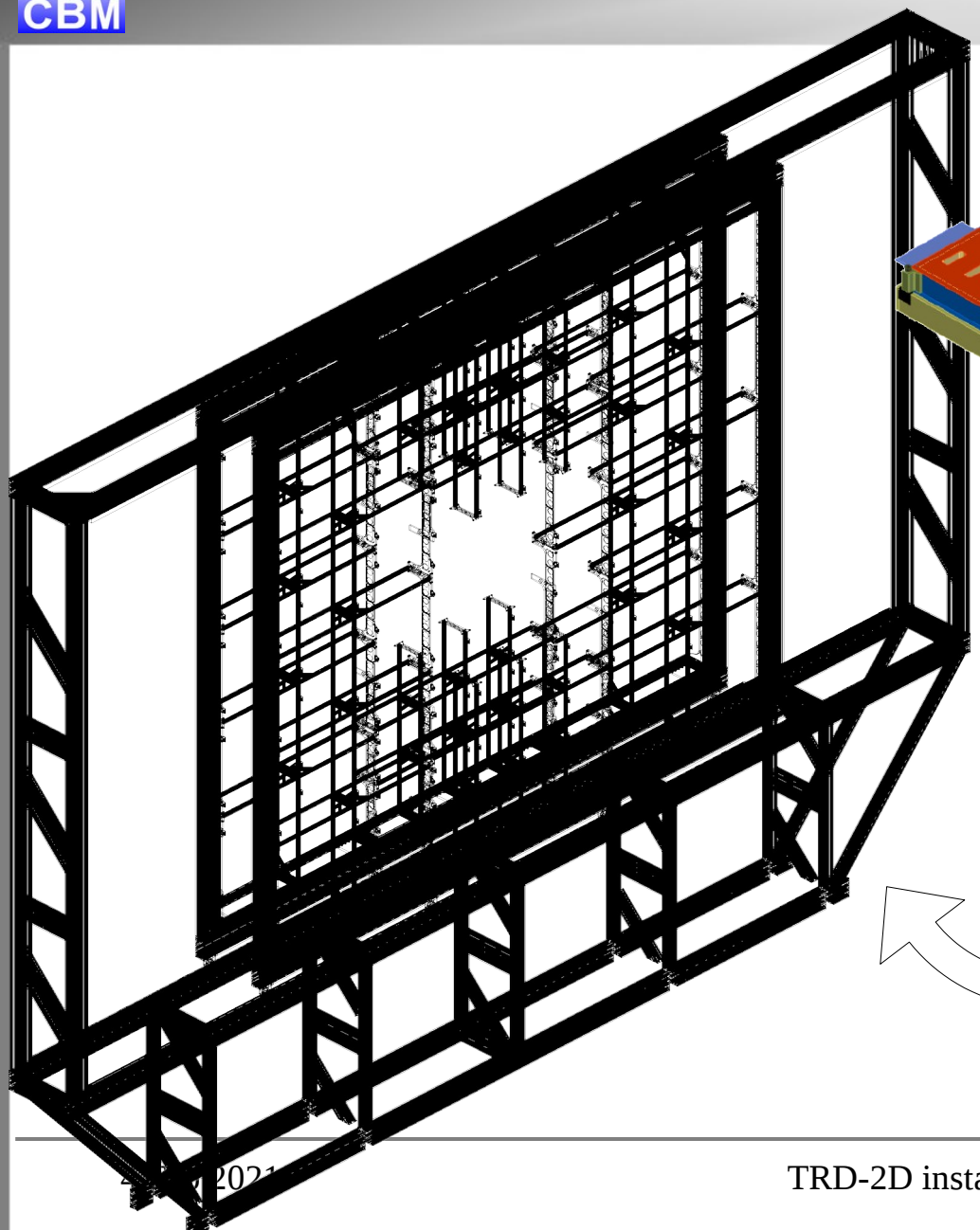
DFH Meeting

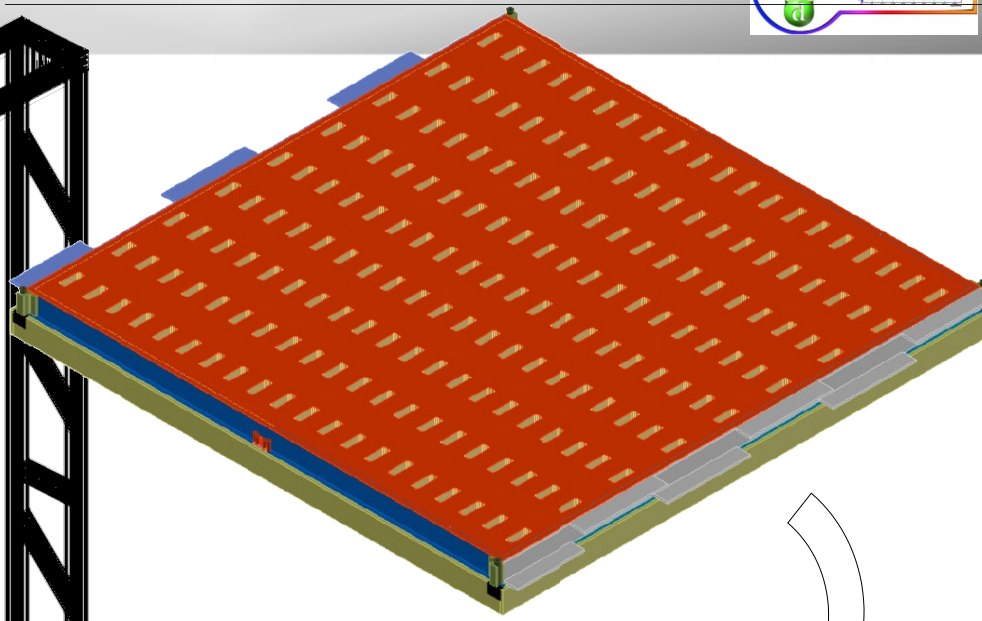
Layout of installation plan document

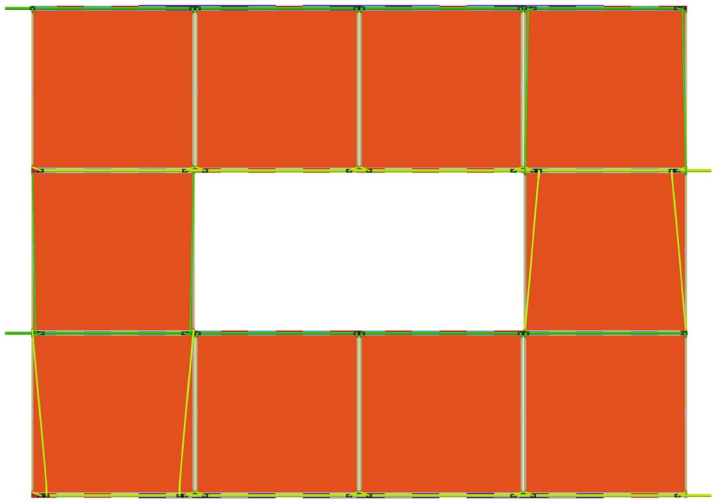
1. Pre-assembly and QC in home institution: Ready for delivery
2. Transport: packaging, handling during transportation, delivery
3. Interim storage at FAIR or other institutions (needed space, room conditions)
4. Pre-assembly at foreign institutions or at FAIR/CBM
   a. needed space, needed special equipment, needed tools, multiple locations (e.g. assembly and debugging)
   b. needed resources in terms of people and time, QC before installation
   c. identify time window(s) needed, sharing of available space
   d. installation of detectors/modules

1. Module wise (ROC+FEE)
   - All services ready for connection
2. YES
3. Wooden boxes of approx. 1 m^3 (10 modules)
   - Max 4 boxes at a time + fittings
   - Room temperature and cleanness
4. FAIR (inner super-module = 10 modules)
   a) At least 10m^2, no special requirements, permanent usage
   b) NO (home workers), 1-2 weeks for all
   c) Depends on other TRD activities
   d) Inner super modules – TENSION WITH THE BEAM PIPE INSTALLATION

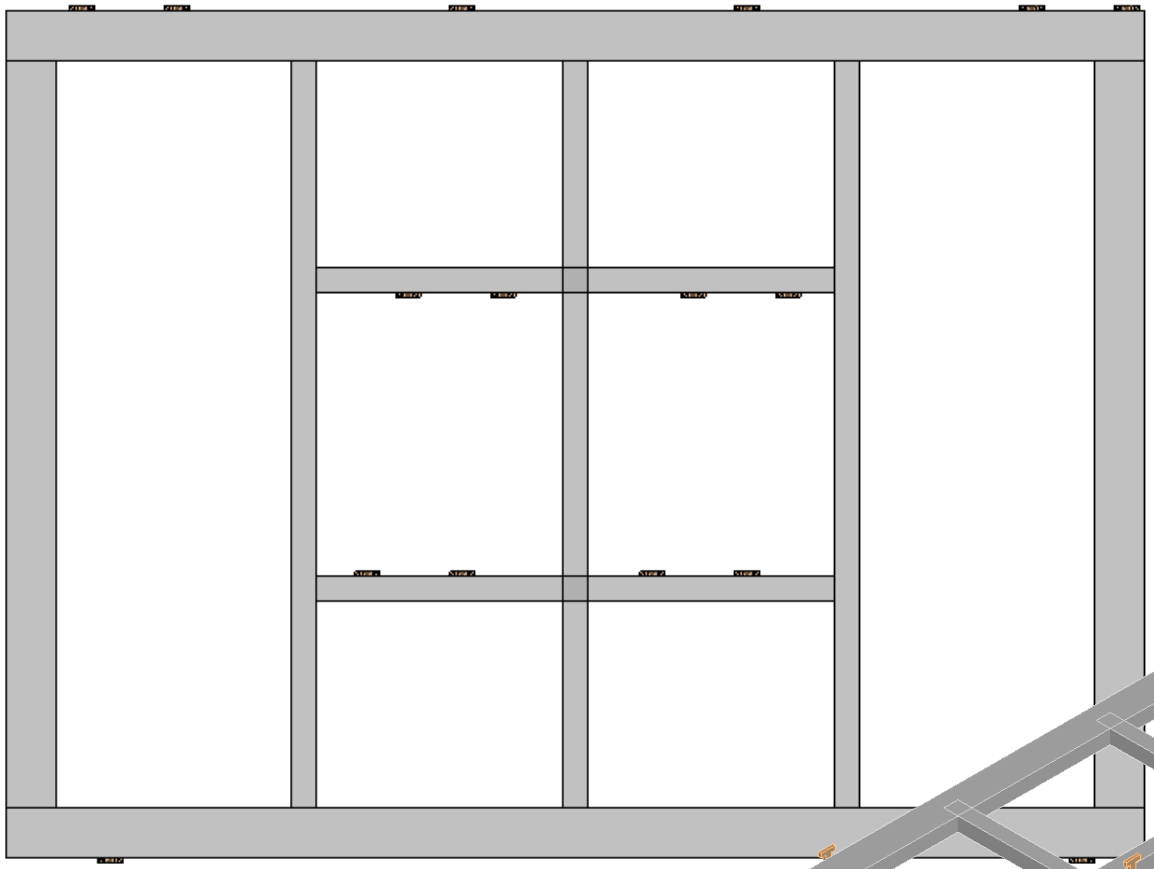
Module → Supermodule → Experimental hall

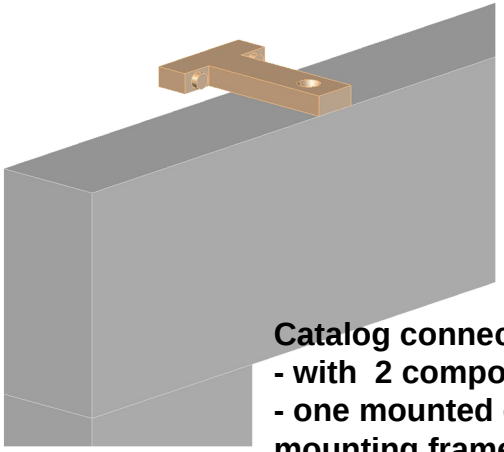






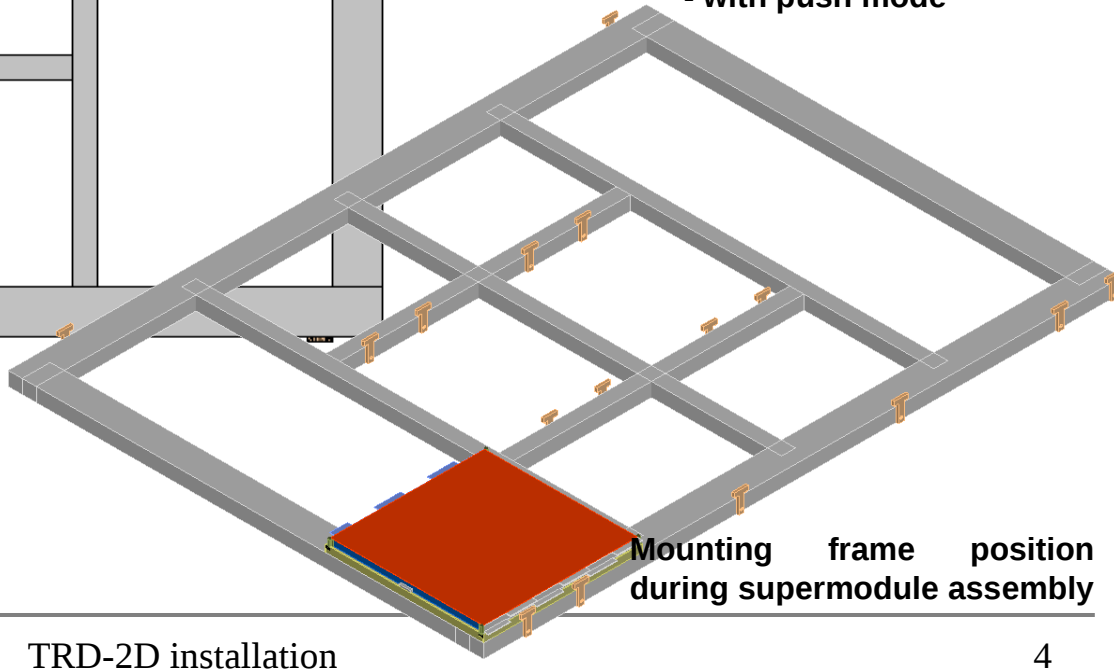
Assembling the supermodule @ FAIR





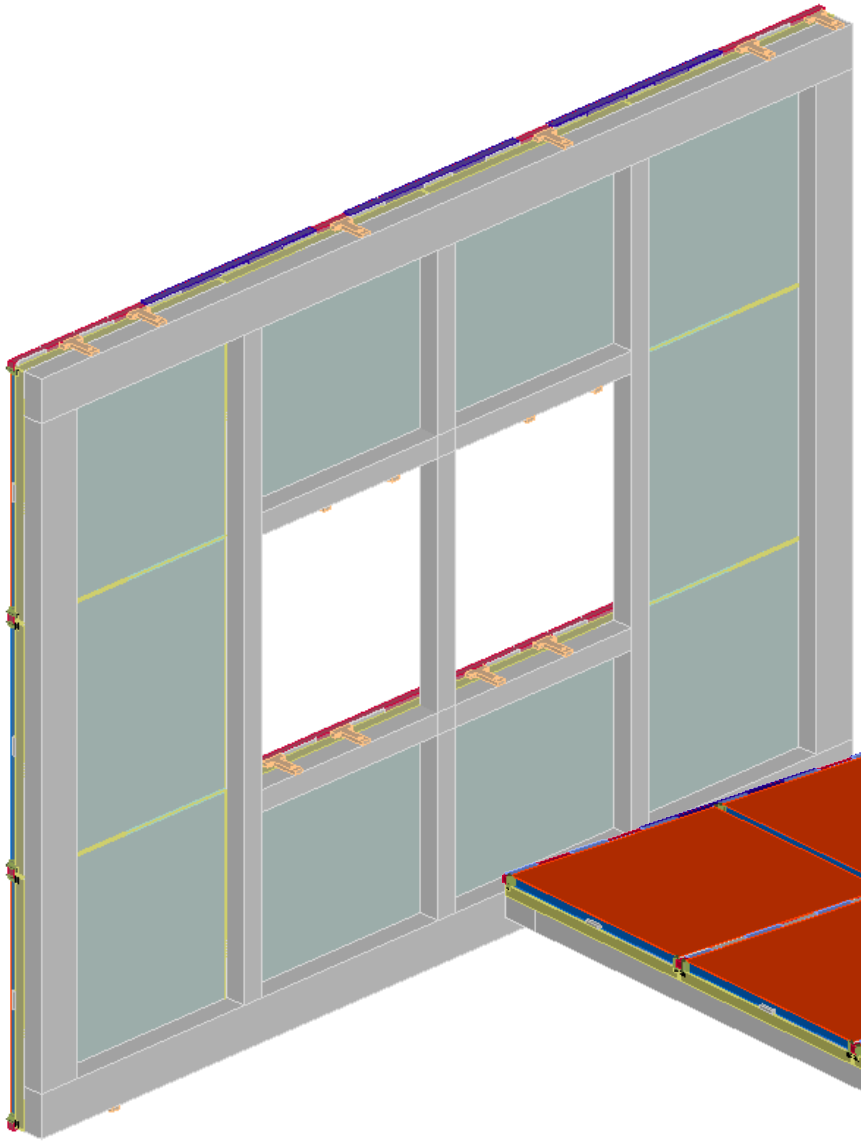
Catalog connection system
- with 2 components,
- one mounted on the mounting frame the other on the TRD-2D structure,
- with push mode

MOUNTING FRAME

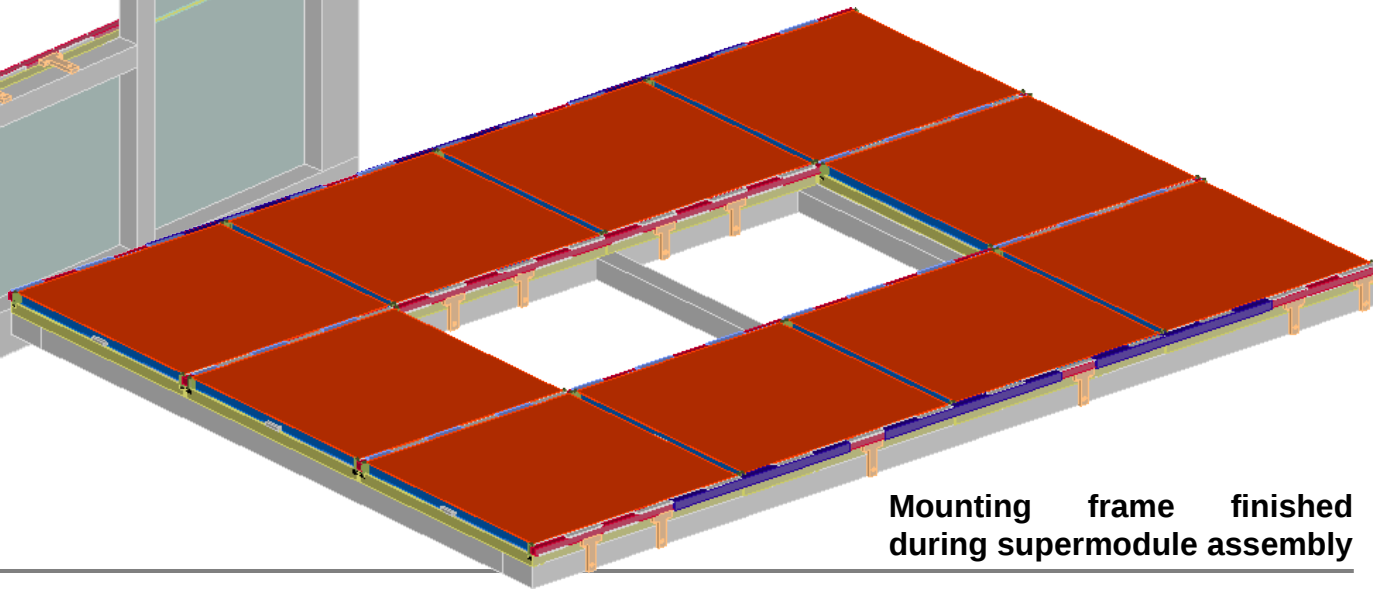


Mounting frame position during supermodule assembly

Mounting frame transport to experimental hall

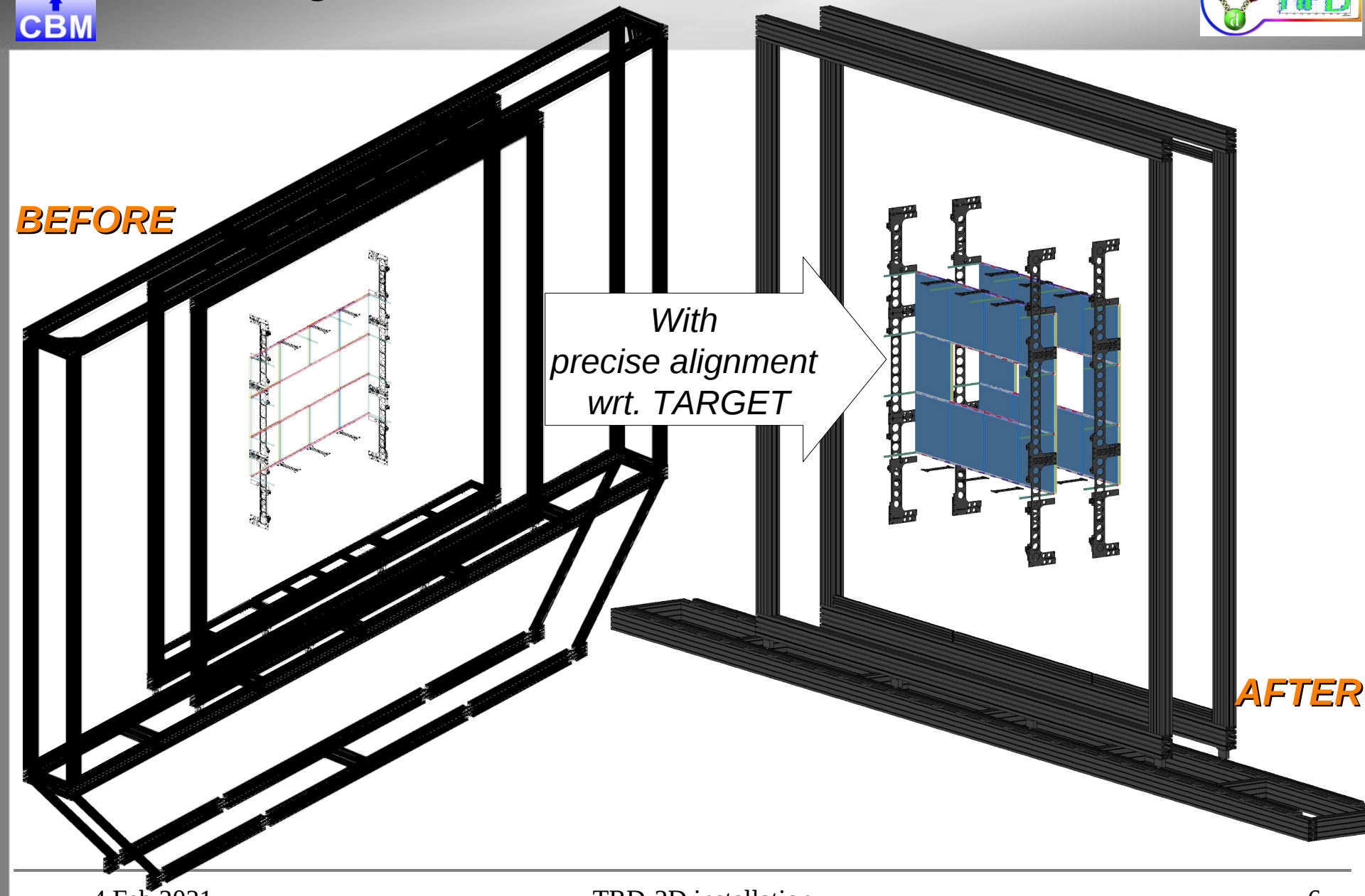


Mounting frame ready for going to experimental hall via elevator and crane

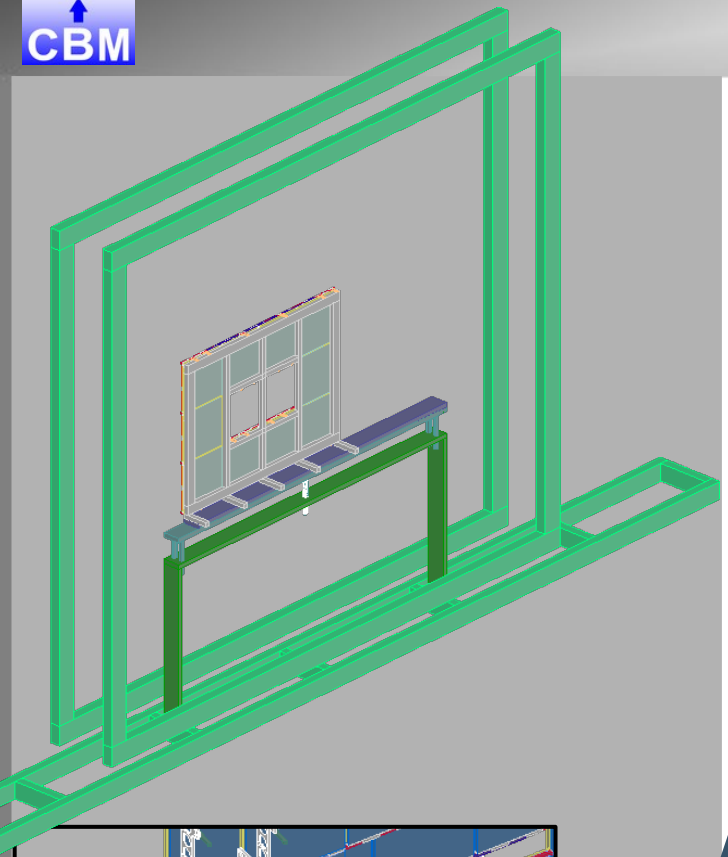


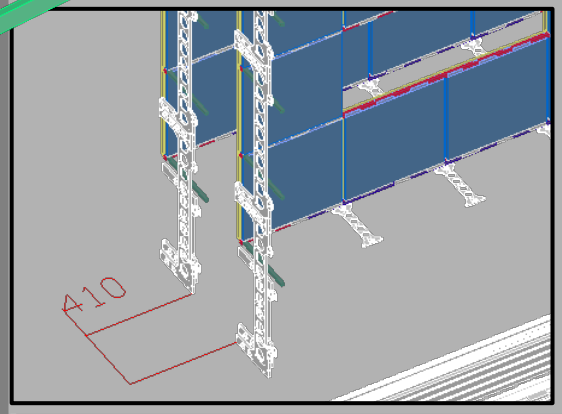
Mounting frame finished during supermodule assembly

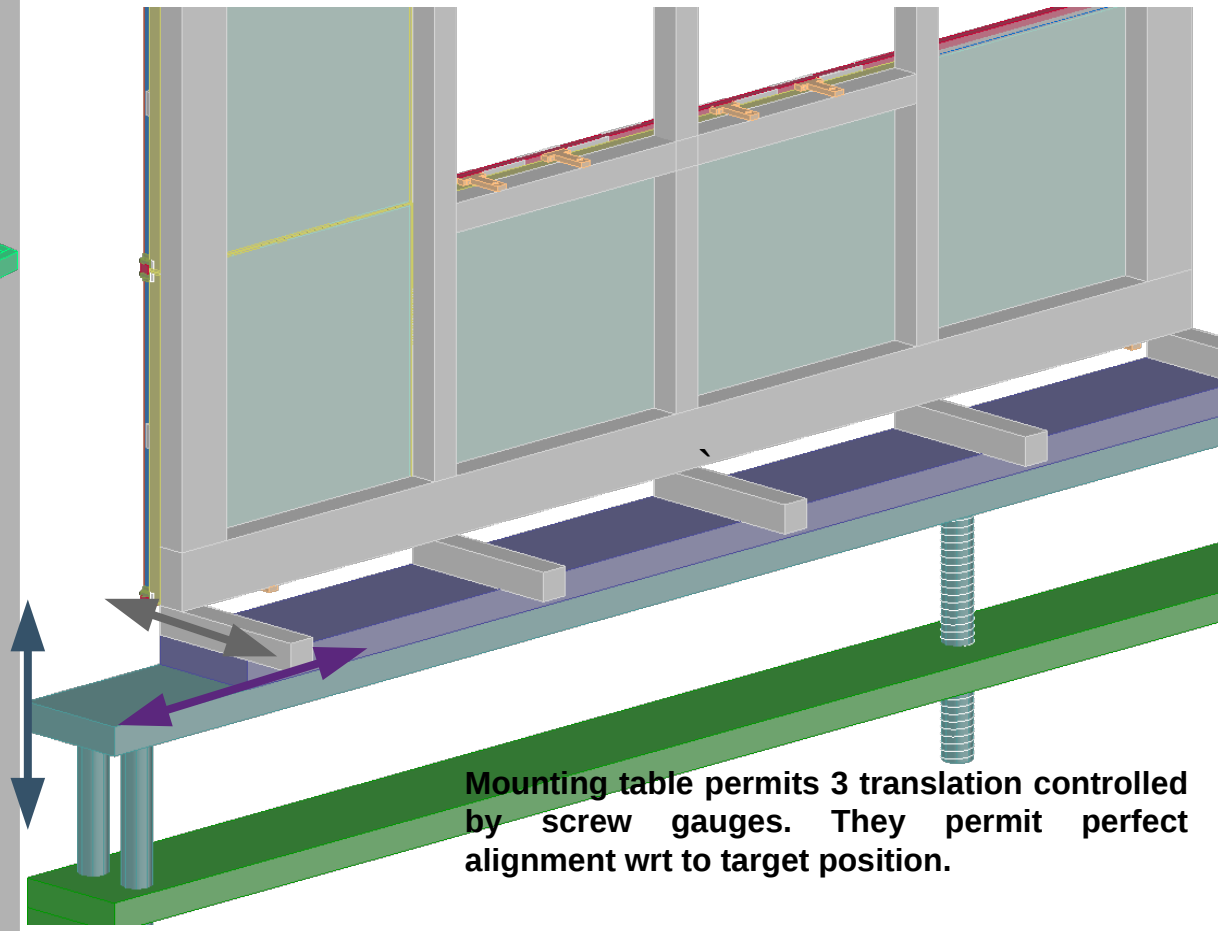
Mounting on the TRD frame



Mounting Table

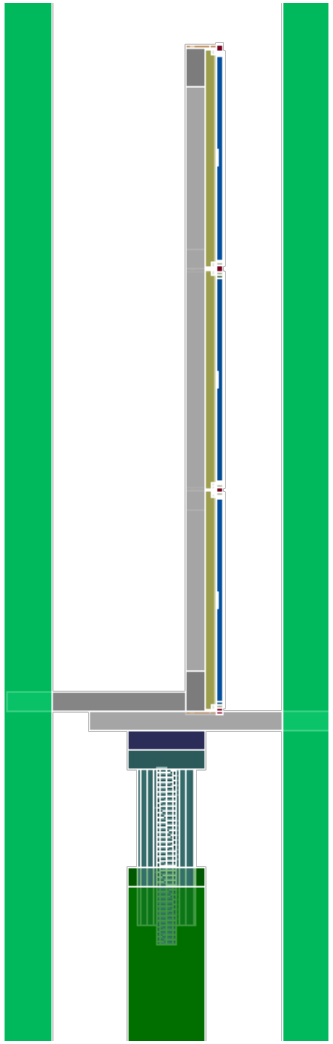






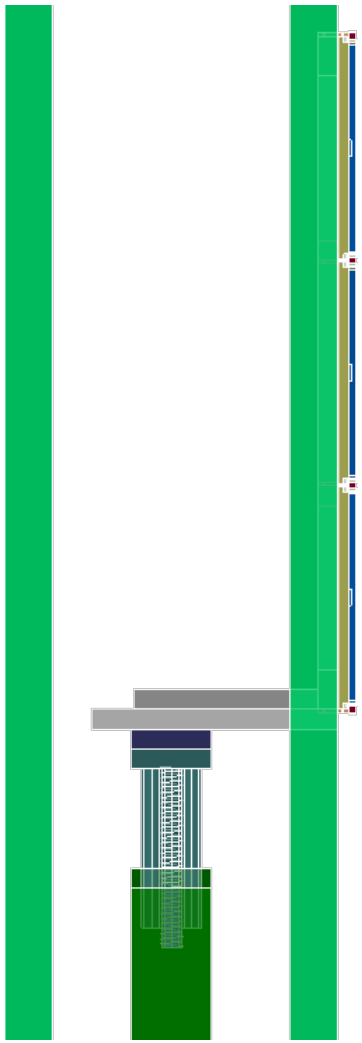
Mounting table permits 3 translation controlled by screw gauges. They permit perfect alignment wrt to target position.

Inserting and extracting the TRD-2D



Lateral view of the installation system after adjusting on vertical and parallel with the TRD frame
And before insertion in the wall

Inserting and extracting the TRD-2D



Lateral view of the installation system after insertion in the TRD frame

Hanging the TRD-2D in place and fix

Decoupling the connectors

Extract the mounting frame