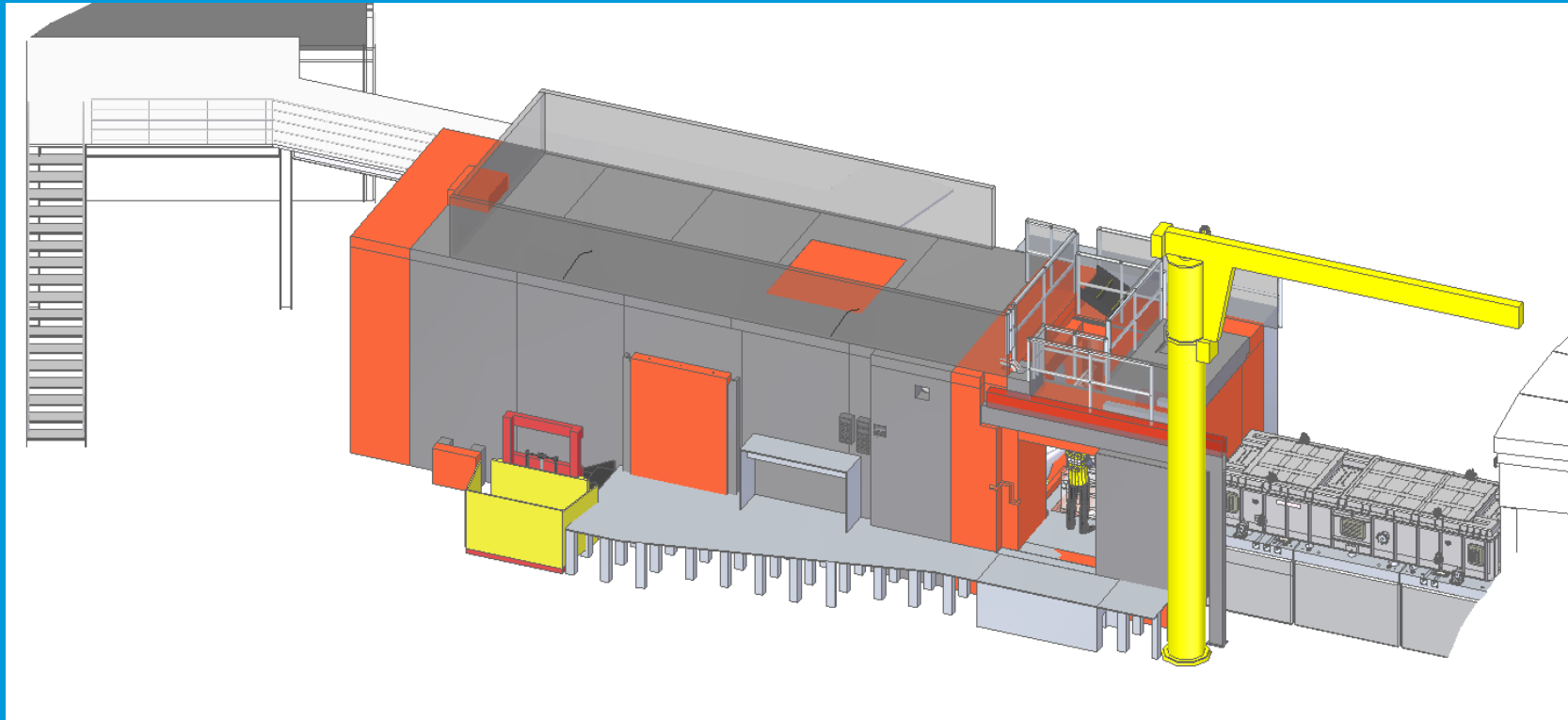


SANS STAP - LOKI



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Engineering Progress

- The design is now complete and frozen for almost all of the instrument components
- Manufacture is well underway and progressing well
- The design of the shielding and external infrastructure remains to be completed
 - As a part of this, the power operated door & roof, the crane, and the goods lift all need tendering
 - The hutch tender is soon to be launched – we are having issues with this
- SNAG had to scrap the first set of copper substrates (reflectivity too low). They have re-made and are awaiting neutrons to confirm all is now well.
- Pre-build started, but was then almost immediately stopped due to COVID-19



Collimation



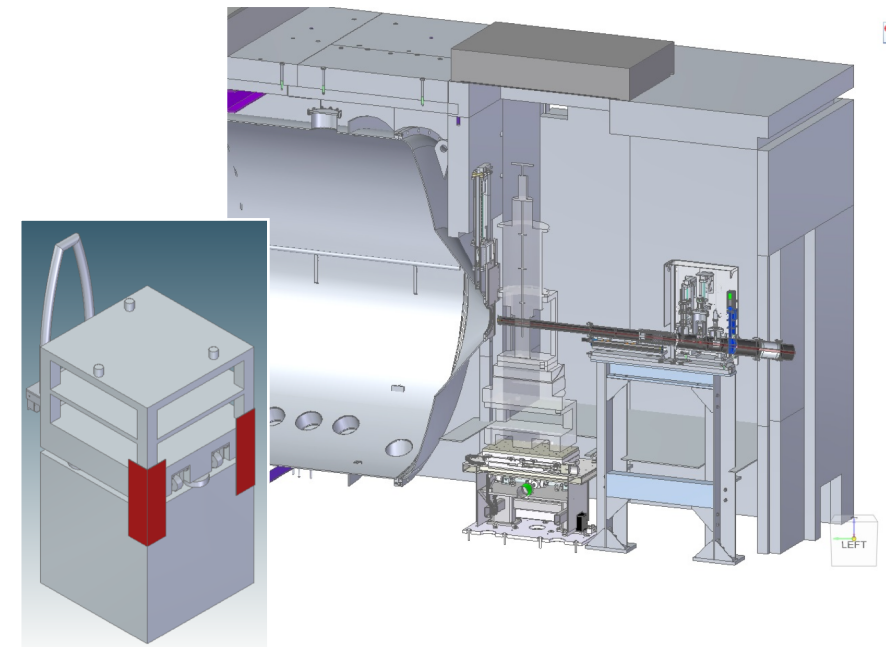
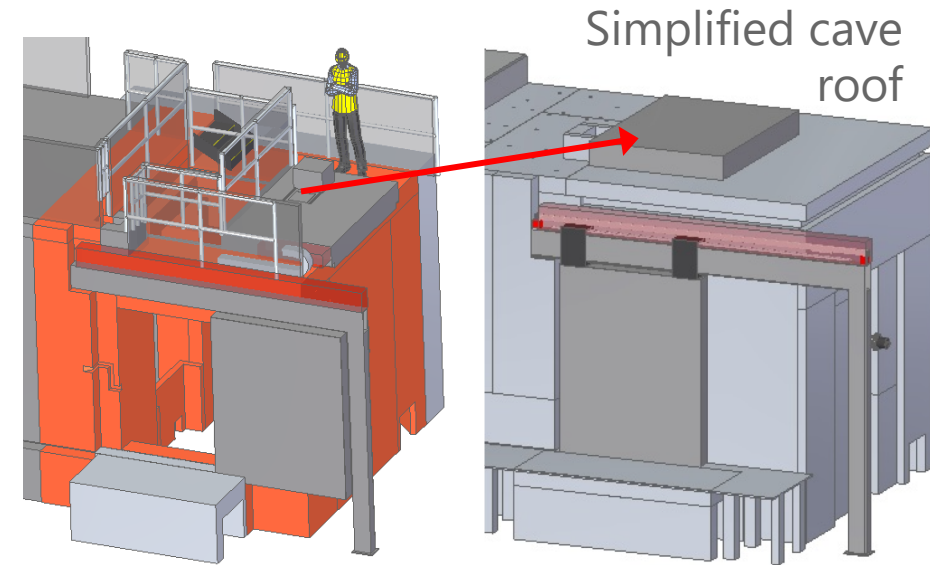
Detector carriages



Heavy shutter

Sample area

- The design is almost complete for all sample area components
- L-SANS interface between LoKI and SKADI better defined, provisionally:
 - Max. 1200 mm floor stack to beam height
 - Interface with 3 kinematic mounts that fit on both stacks
- Change in the roof design:
 - Raised the height of the roof/removed the small hatch
 - To change sample sticks we will wheel in a small set of steps that can be locked in place
 - PROS: removed safety risks, easily fit the largest SES
 - CONS: potentially more time consuming sample change



Detector Tests

- Manufacture: underway and delivery has started for the straws
- Data chain: firmware for signal processing to transmit to back-end electronics complete. Full data chain test planned as soon as ISIS are up and running again
- SANS tests on Larmor in December 2019:
 - 2 modules were tested at full voltage (6 mm position res.)
 - Larmor vacuum tank eliminated parasitic air scattering
 - Challenges: Nothing is ever just plug and play...
 - Progress: Data in Mantid, processing of data using Mantid algorithm underway
 - Next steps: Calculate relative efficiency (the shape of the direct beam) through the layers.
 - Currently working on the SANS data reduction workflow

