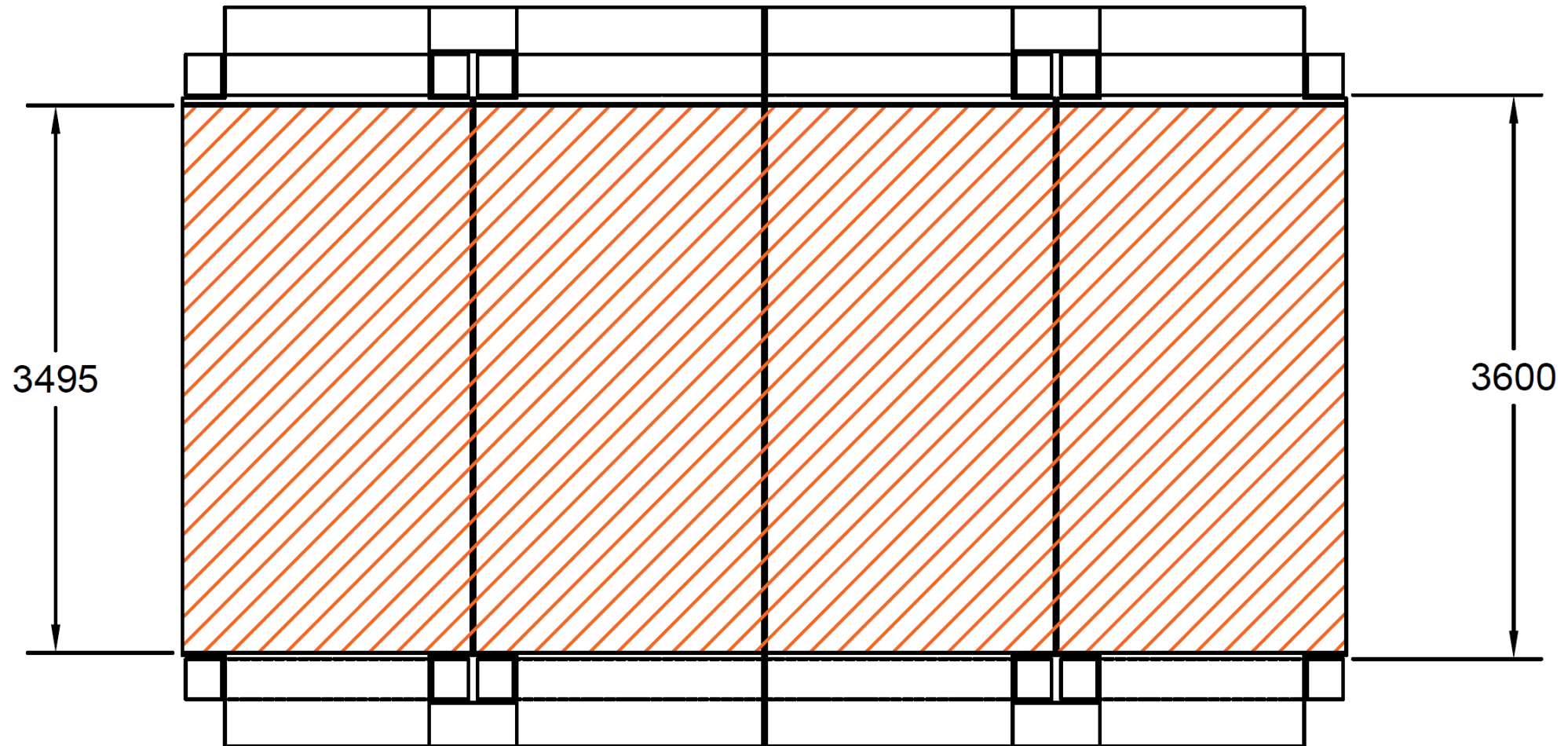

Cable Extraction Design Concept

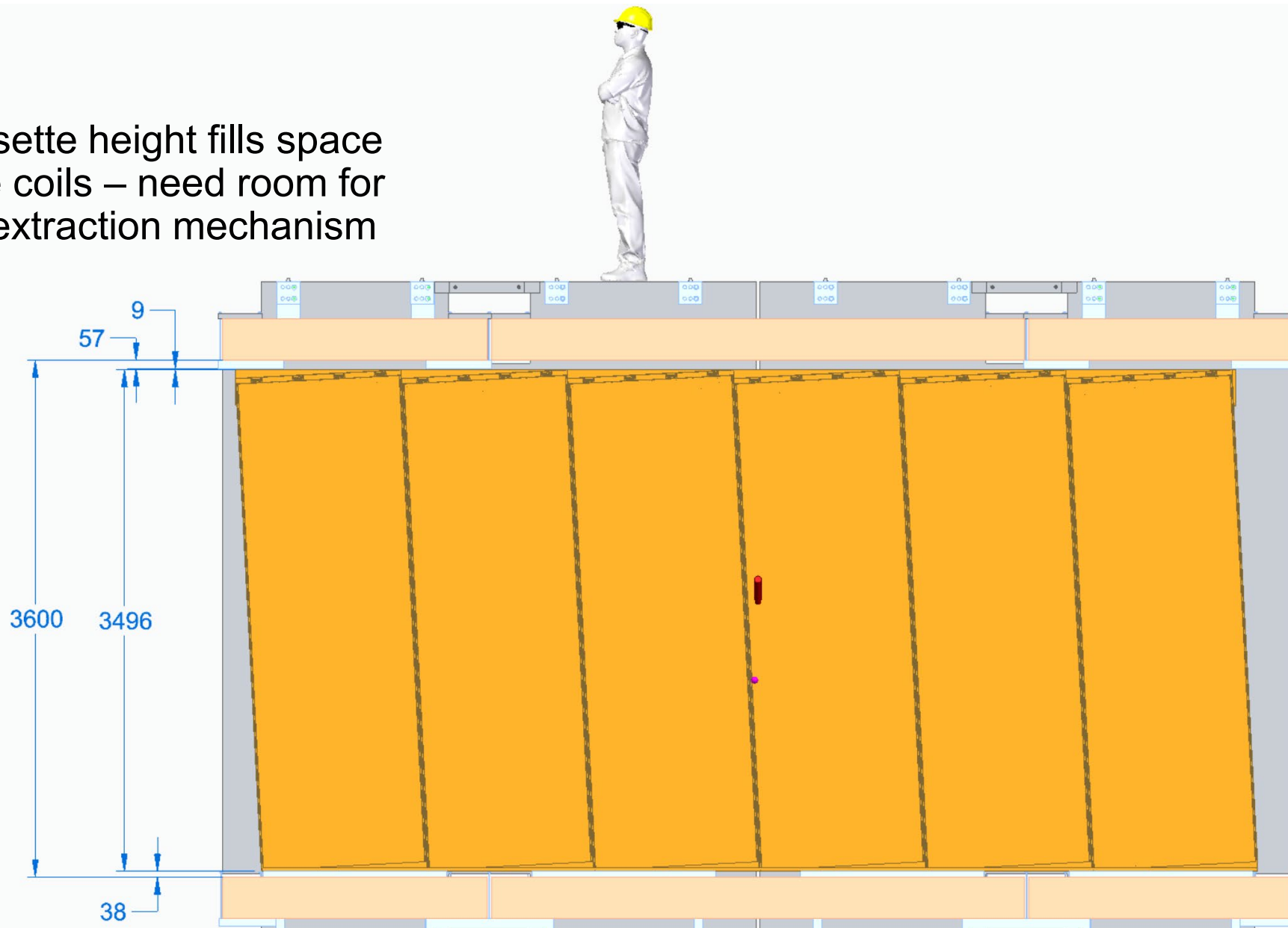
Julianna Abel, Andy Furmanski, Rucha Pansare
11/22/24



Cassette Envelope Overlayed with the Steel & Coils

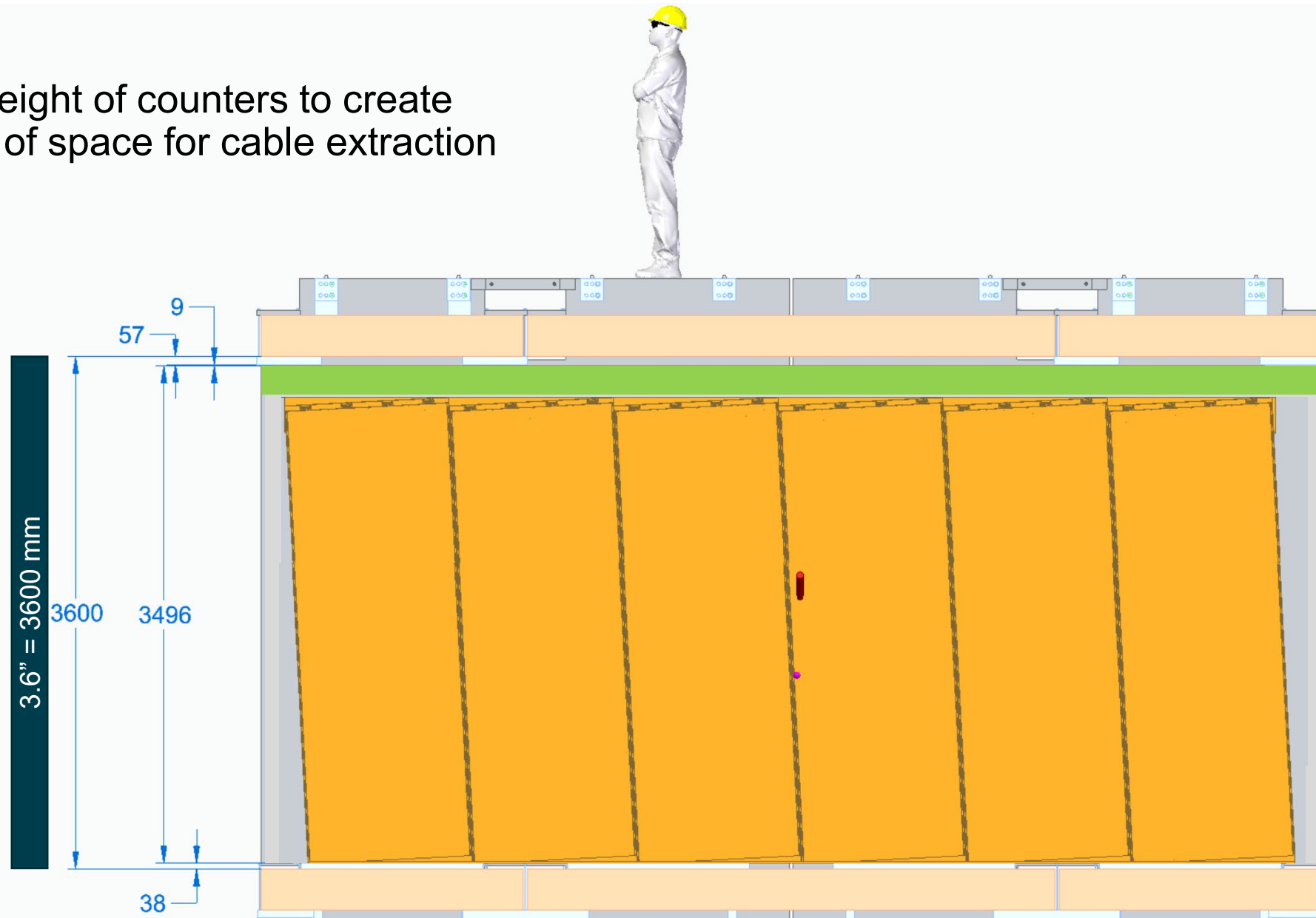


Current cassette height fills space between the coils – need room for cables and extraction mechanism



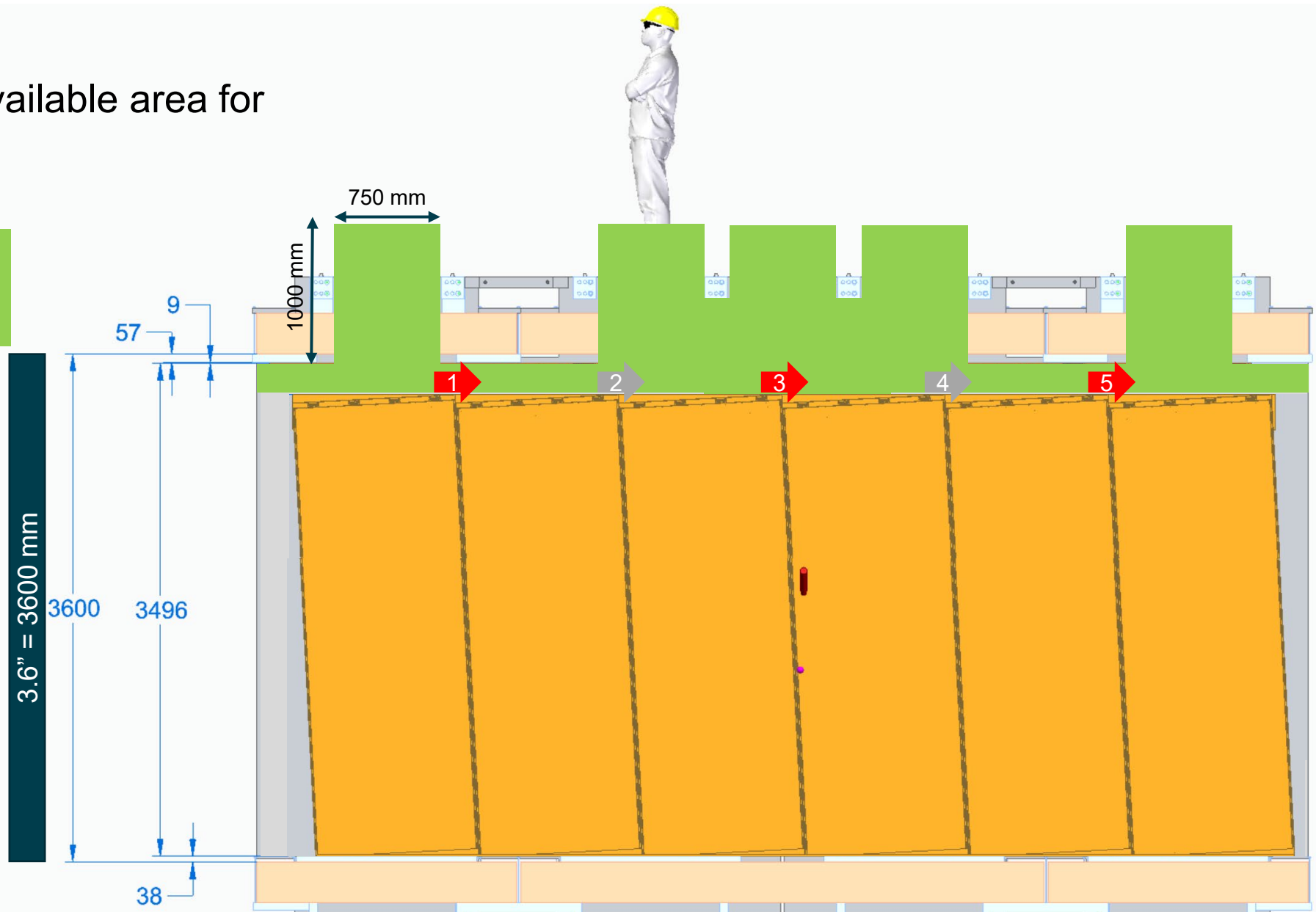
Reduce height of counters to create
~150 mm of space for cable extraction

Available
Space



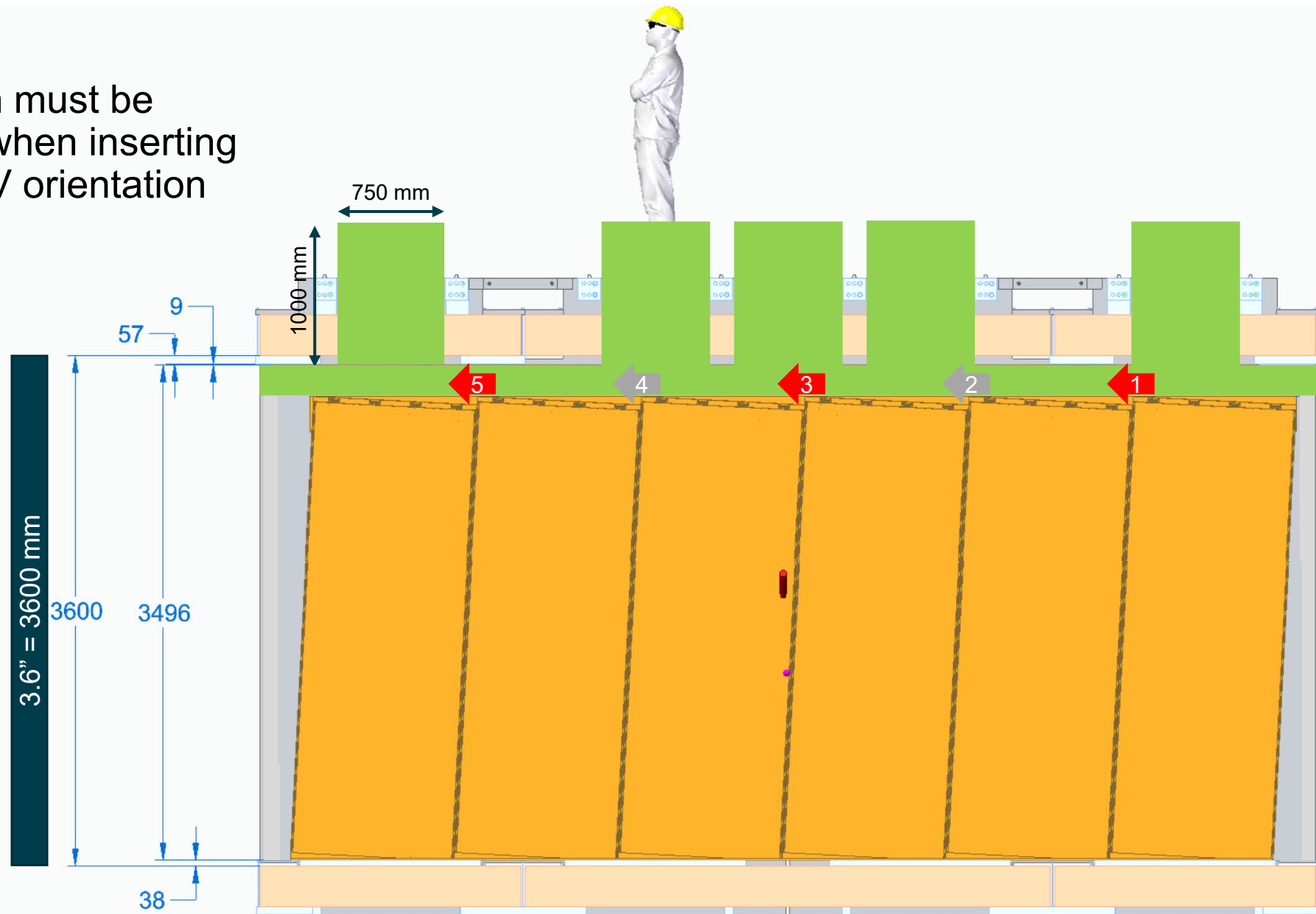
Identify available area for extraction

Available Space

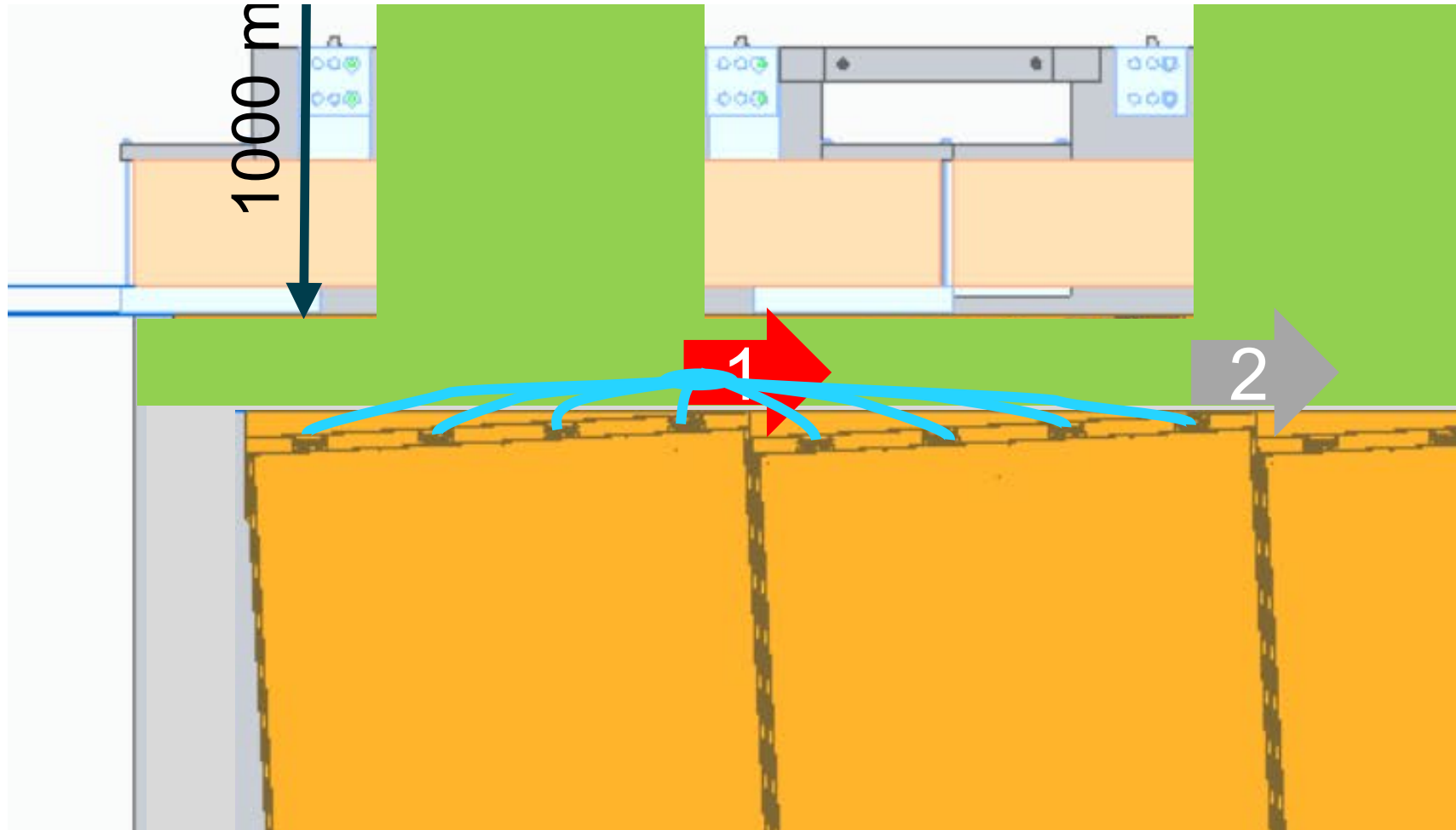


Extraction must be possible when inserting in U and V orientation

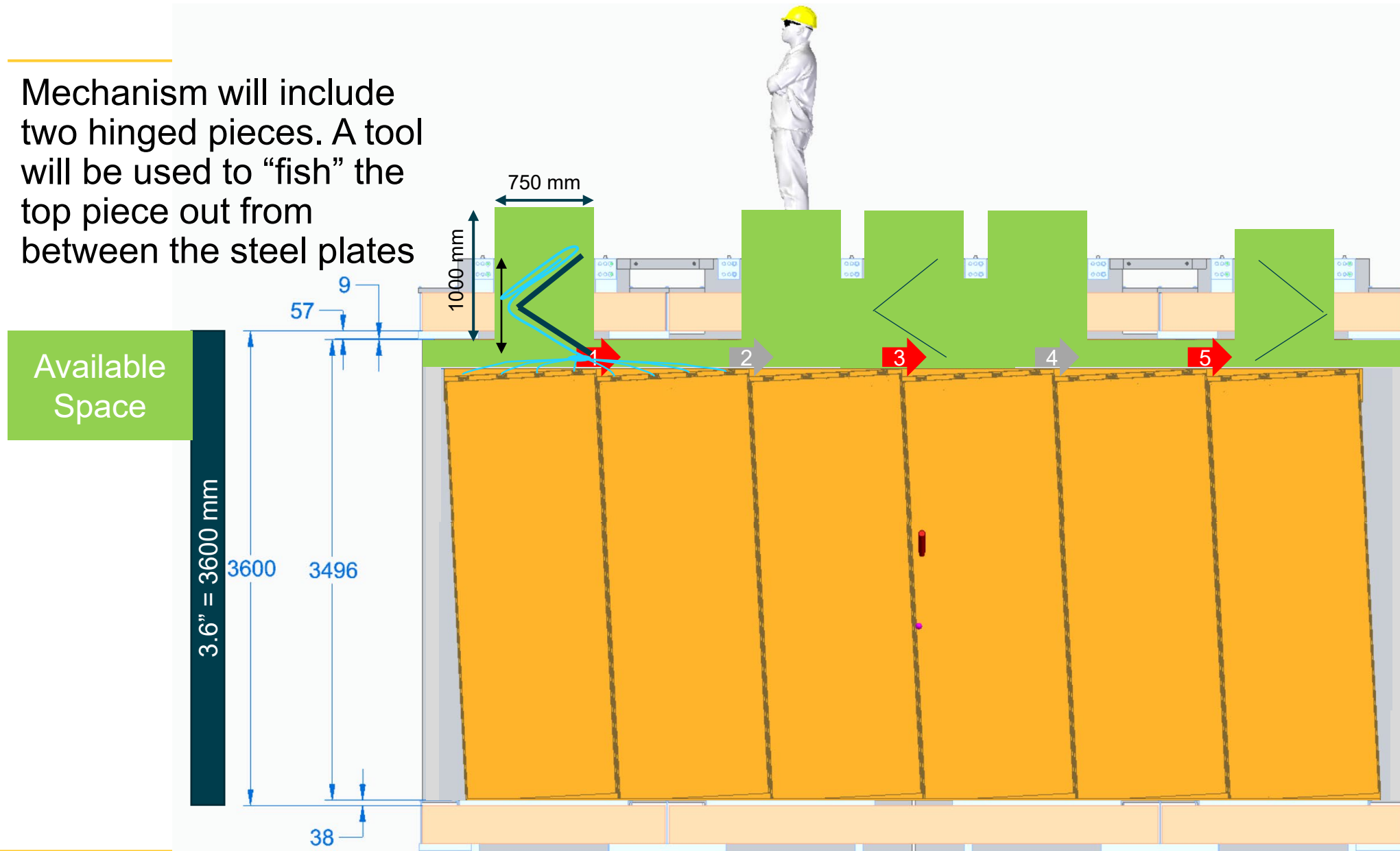
Available Space



Gather cables near the interface of two modules

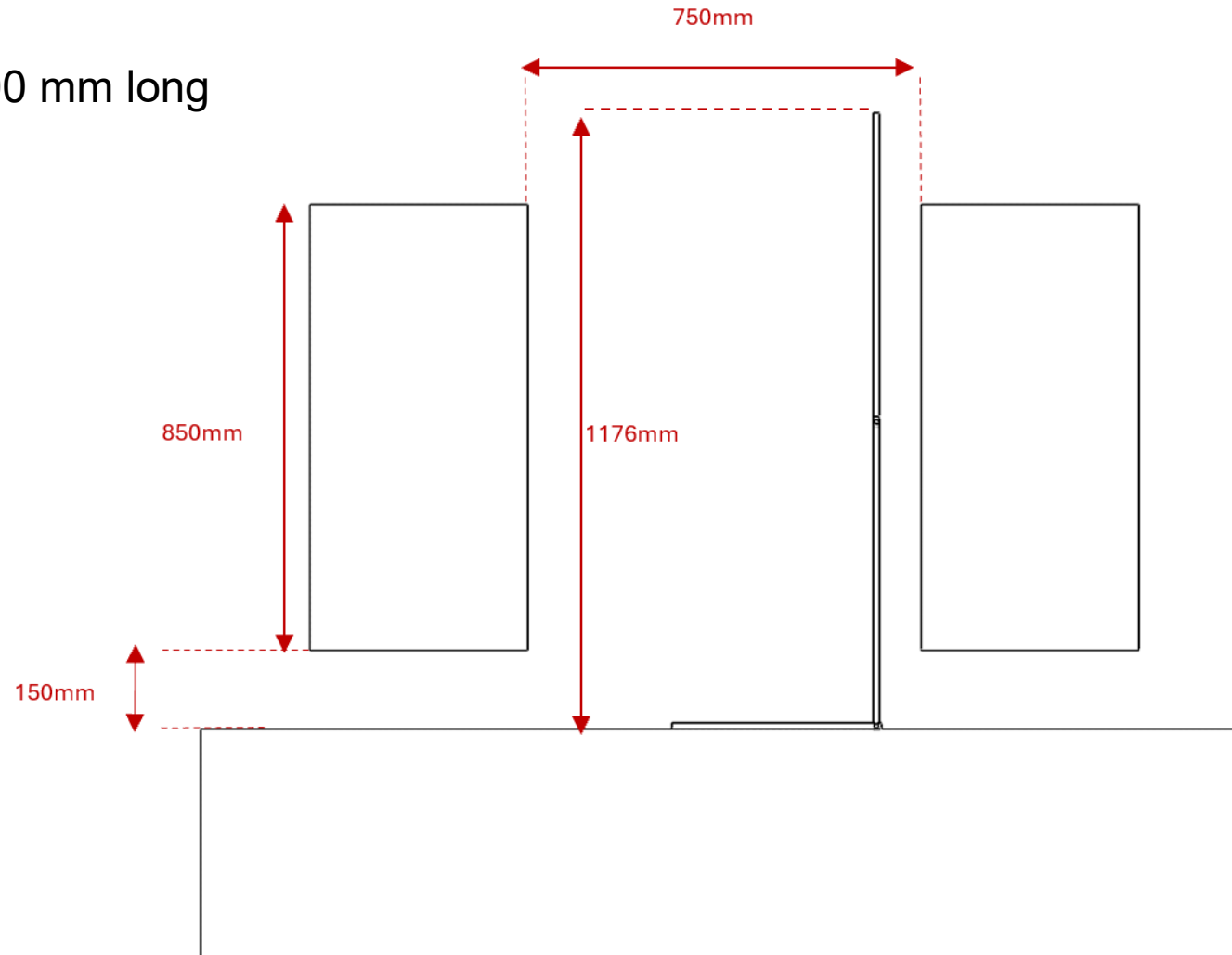


Mechanism will include two hinged pieces. A tool will be used to “fish” the top piece out from between the steel plates



Preliminary Extraction Design

Each link is ~600 mm long



Extraction Mechanism Kinematics



Extraction Mechanism Kinematics



Cannot block area for extraction

Place electrical boxes in minimal fringe field areas

Available Space

Must Remain open for Extraction

Electrical Boxes

