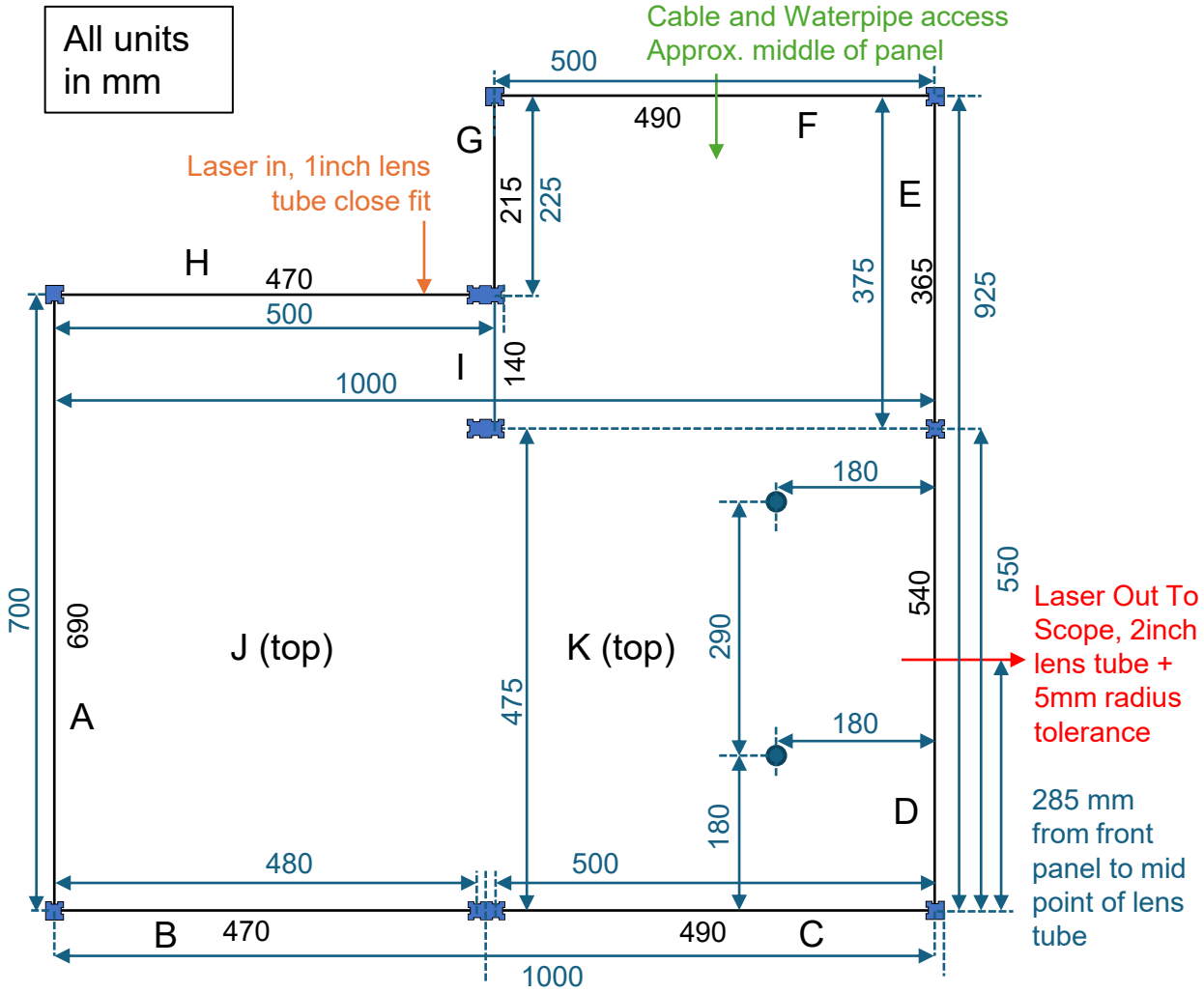
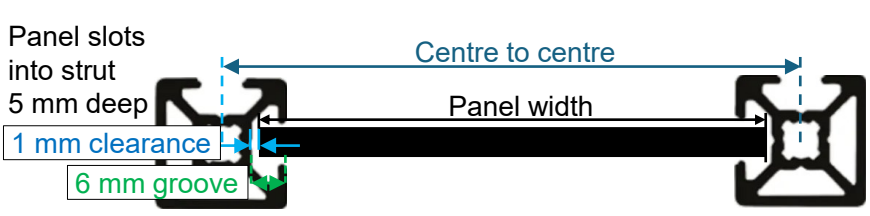
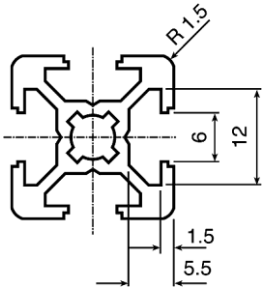
Enclosure layout (from above)



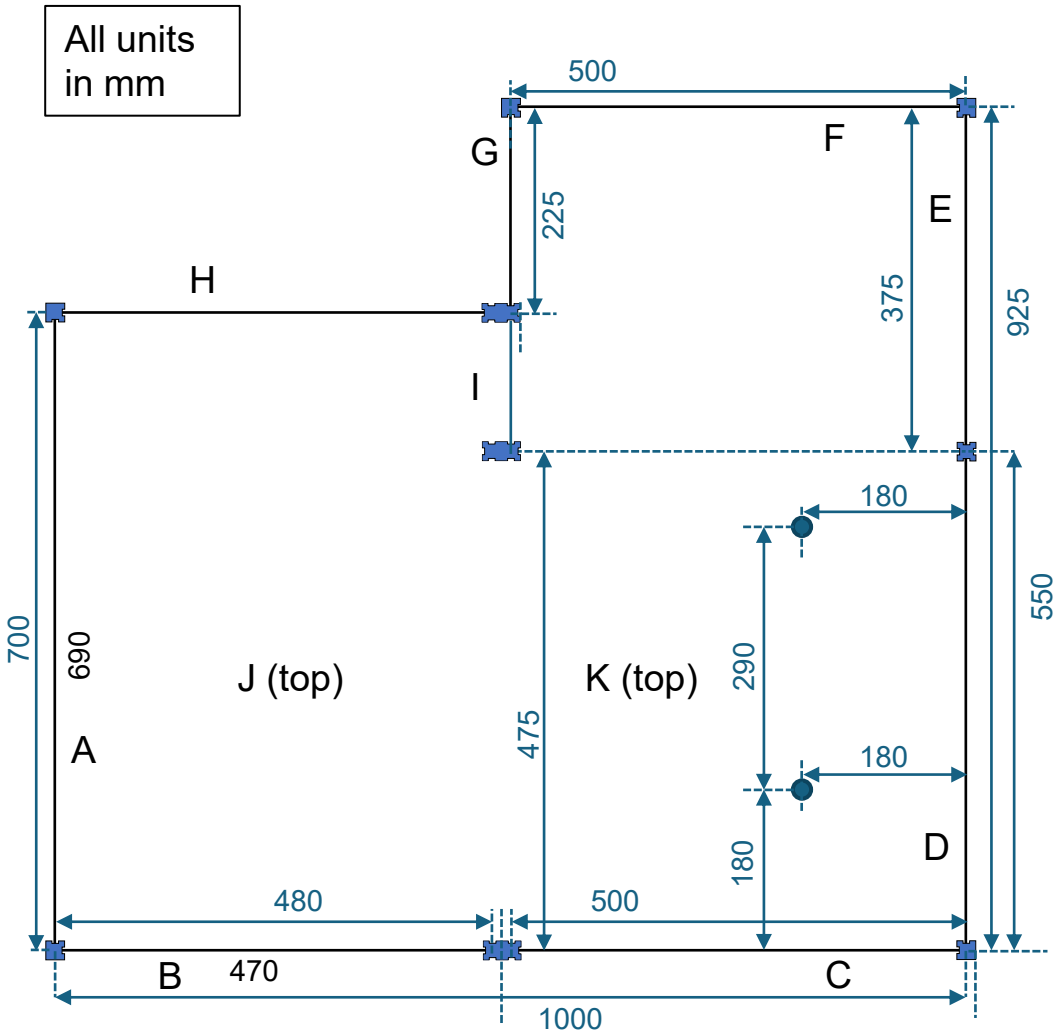
- 20x20 2NVS Rexroth, M6 Bolt into table, M6 Torx Bolt through lid into top
- 20x40 Rexroth, M6 Bolt into table on the right hand (laser out) 20x20 side, M6 Torx Bolt through both lids into top of both 20x20 sides of each strut
- 20x20 3N Rexroth, M6 Bolt into table, M6 Torx Bolt through lid into top
- 20 mm Diameter vertical strut acting as microscope chamber support
- All thin blue arrow and blue font measurements are centre to centre (e.g. centre of Rexroth strut or post strut for microscope chamber)

Black font measurements are edge of panel to edge of panel

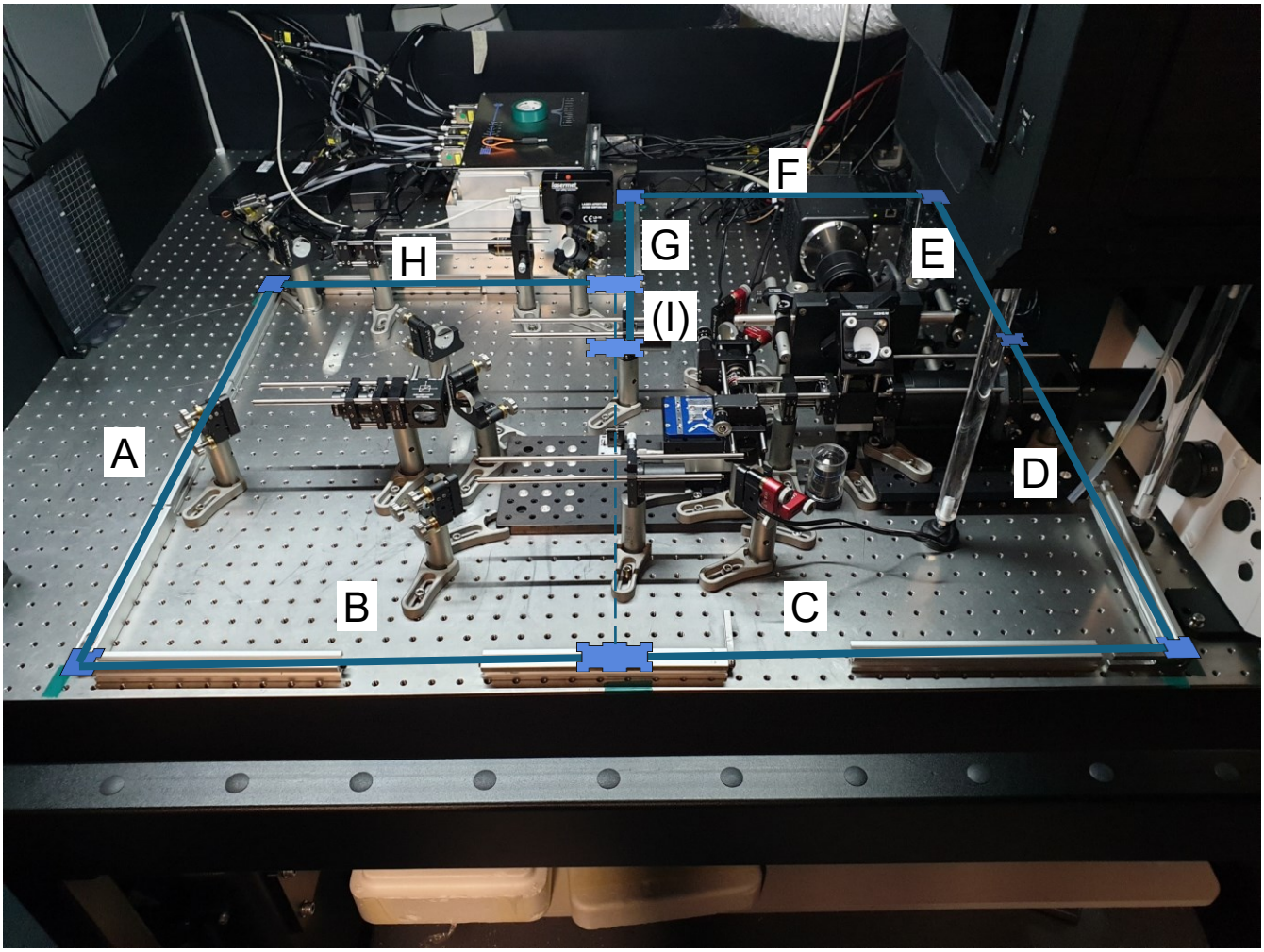




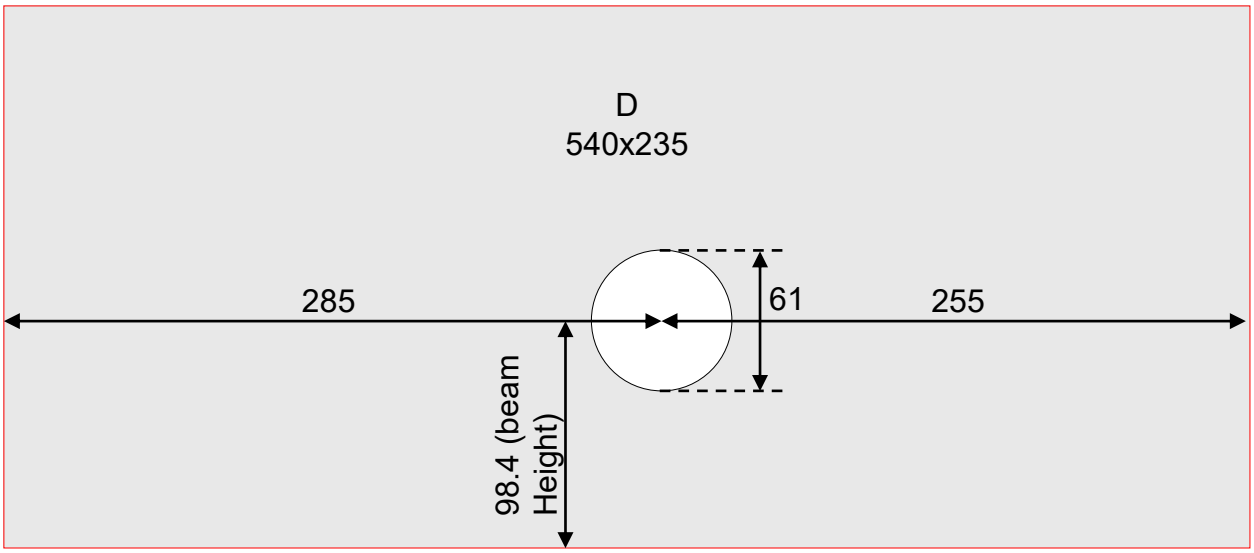
Enclosure layout (from above, simplified)



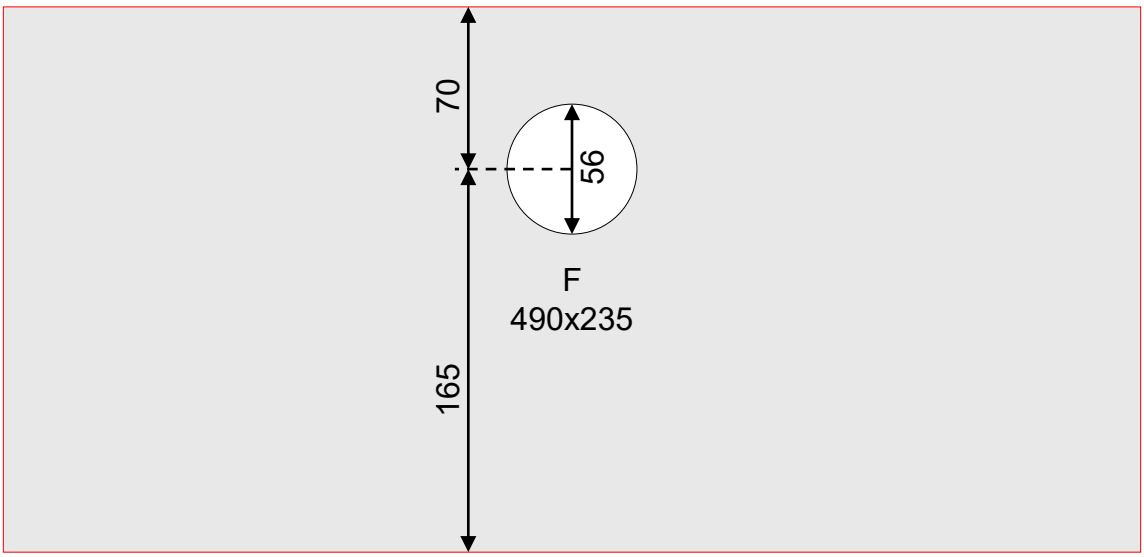
Enclosure outline superimposed on setup



D panel: Right side – Cut out for SM2 Tube for laser out to scope



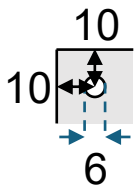
F panel: Back Right – Cut out for Cables and water pipes



H panel: Back Left – Laser in Via Thorlabs SM1

Lid panels

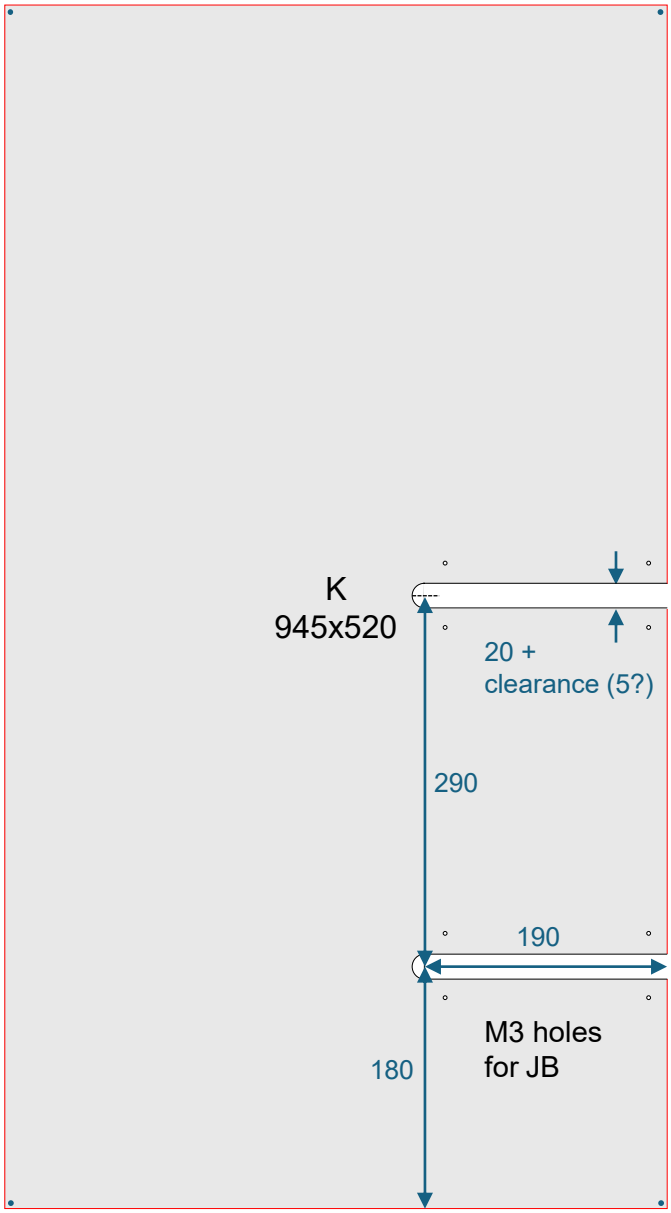
M6 holes are drilled in the corners of the lid panels 10 mm from both edges
Lid panel K has rectangular cutouts (rounded edge) so it can slide past the incubator-supporting posts
M3 holes are drilled in K for KA and KB. M3 clinch nut (RS 827-603) is installed on underside of these holes. See full assembly on pages 8 and 10.

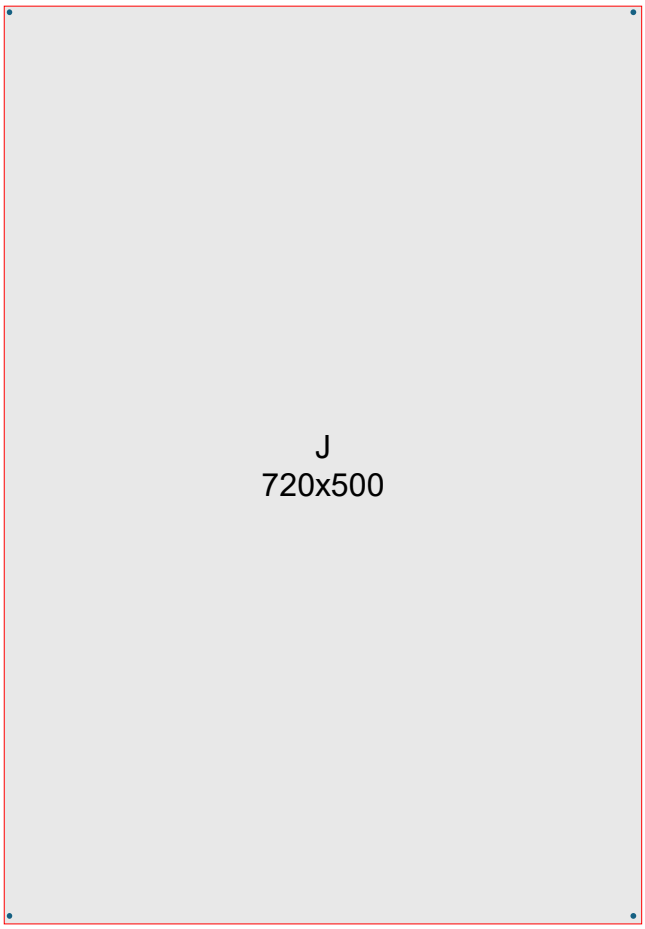


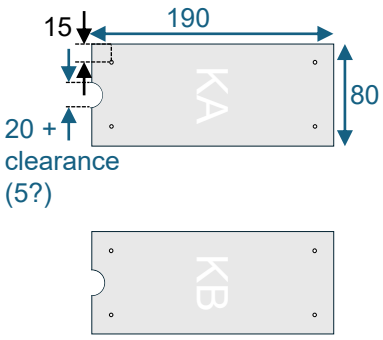
M6 holes in corners

Clinch nut

Installed this way, inside side of lid

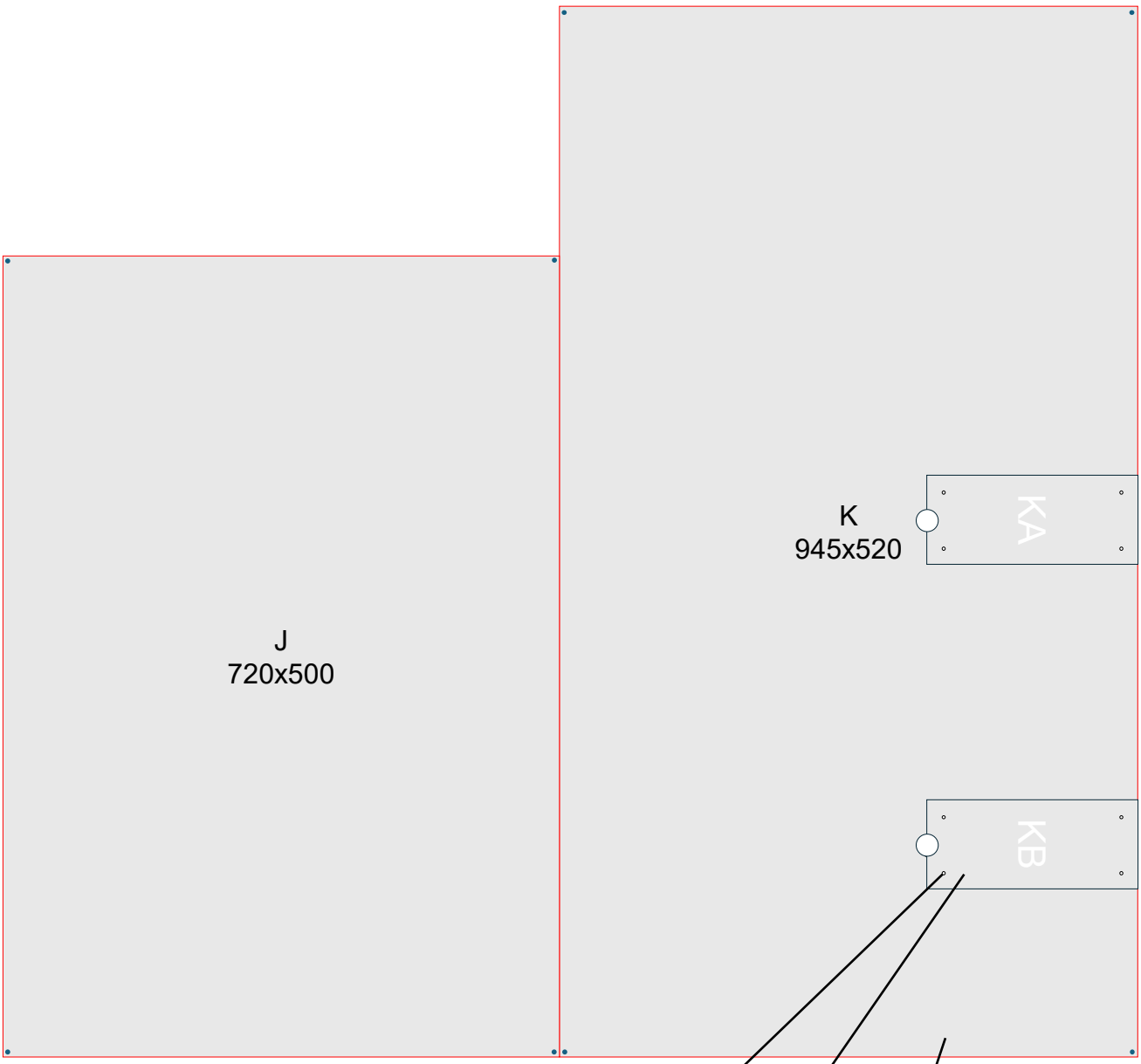


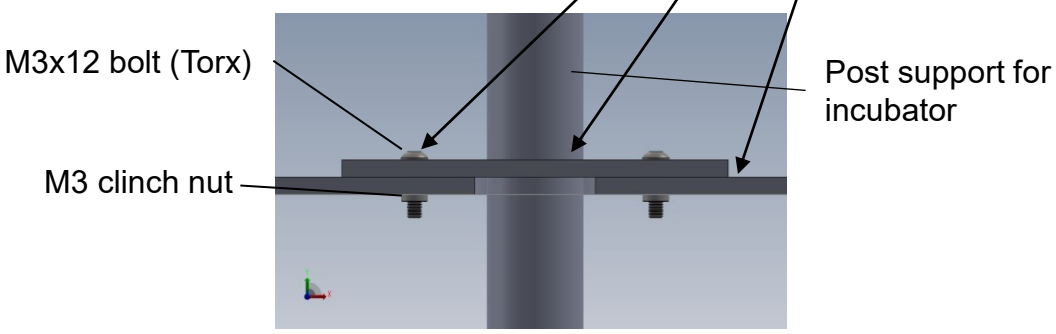




M3 holes in corners on JA/JB

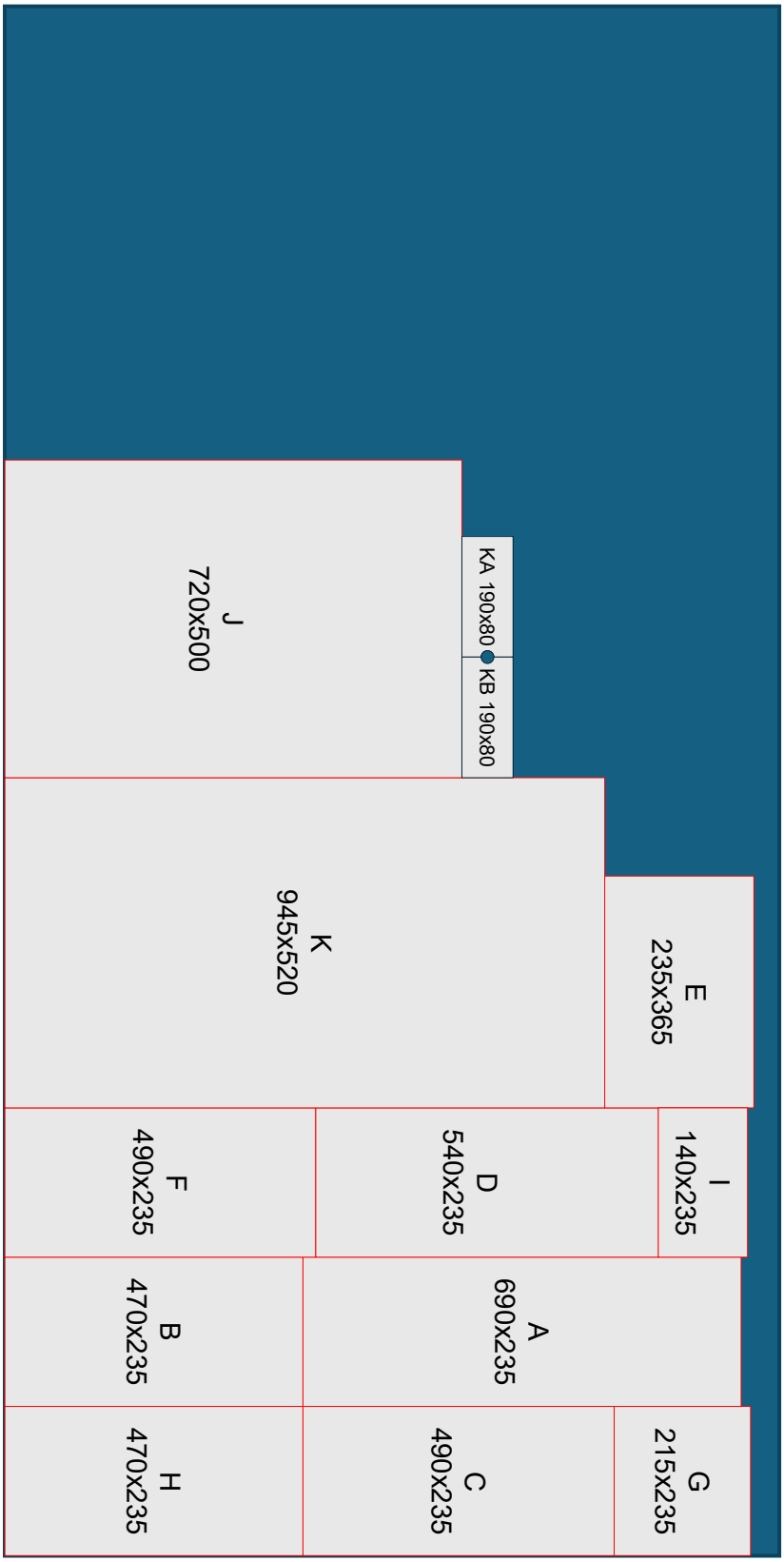
Assembled lid panels





Example cut map from single piece

(ALUPANEL 2440x1220 Aluminium Composite Panel - Dibond, Alupanel, Alubond & Alliance Board | Bay Plastics)

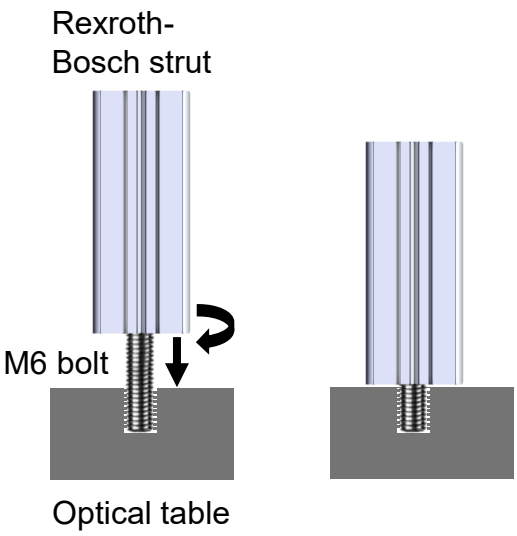


Assembly instructions

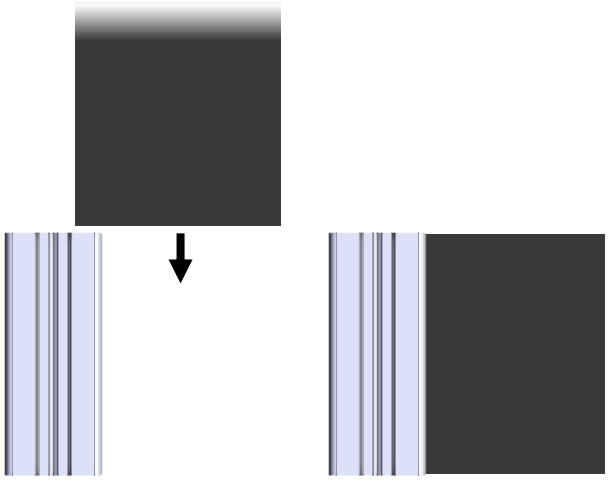
Struts should first be (hand) M6 tapped

1. Screw M6 threaded bar into the optical table/breadboard according to the schematic on page 2. The centre of the struts screw onto the bars to fix them in place
2. Panels slide into the grooves of the struts from above, there is 1 mm clearance either side
3. The lids (J and K) are fixed to the top of the posts by M6 machine screws
4. Once K is slid past the incubator support posts, the cutout covers KA and KB are fixed to lid panel K (which has clinch nuts installed) with M3x8 Torx machine screws

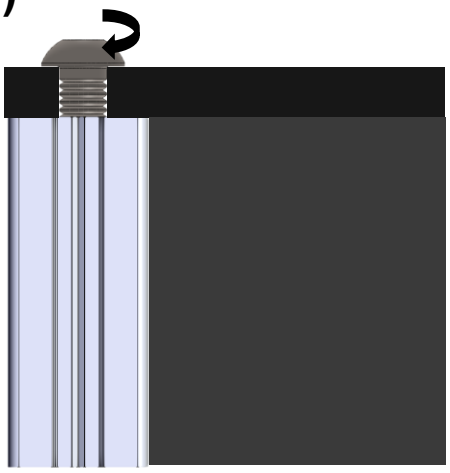
(1)



(2)



(3)



(4)