MESH ENCLOSURES

BUILD GUIDE

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MESH DESIGN BY RAT RIG
GENERAL INSTRUCTIONS:

THE MESH ENCLOSURES ARE EASY TO PUT TOGETHER, ESPECIALLY THE “STANDARD” CUBES. THE LARGER VERSIONS SUCH AS THE “PRINTER PRO” ARE ALSO PRETTY SIMPLE TO BUILD BUT IT IS ADVISED TO FOLLOW A CERTAIN ORDER AS TO AVOID UNNECESSARY STEPS.

THIS MANUAL SHOWS THE ASSEMBLY OF THE “PRINTER PRO” VERSION, BUT IT SHOWS ALL THE NECESSARY STEPS FOR THE OTHER MODELS TOO. FOR THE “STANDARD” MODEL, JUST USE THE SUPPLIED CORNERS AND TAKE A LOOK AT THE “DOOR” SECTION OF THIS MANUAL.

FOR ALUMINIUM LENGTHS AND PANEL DIMENSIONS, SEE THE LAST CHAPTER OF THIS MANUAL.

GENERAL GUIDELINES:

- OUTER CORNERS USE THE “3 WAY INSIDE CORNER BRACKETS”
- PANELS SHOULD BE INSERTED INSIDE THE SLOTS, AND THE RUBBER PROFILE CAN BE USED AS THE FINAL STEP TO PROPERLY FIX THE PANELS IN PLACE.
- PLATES ARE NOT USED ON SIDES WITH DOORS, ON THESE SIDES WE USE INSIDE HIDDEN CORNERS TO ALLOW DOORS TO OPEN
- FOR THE MAIN FRAME, DON’T TIGHTEN DOWN ANYTHING UNTIL THE FRAME IS FULLY BUILT. THE IDEA IS TO STAND THE FRAME UP, MAKE SURE ALL RAILS AND PANELS ARE ALIGNED, AND THEN FINALLY DO THE FINAL TIGHTENING.
- PANELS SHOULD HAVE ABOUT 2MM OF EXTRA LOOSE SPACE ON ALL SIDES (TOP, BOTTOM, LEFT, RIGHT). THE RUBBER FIXING PROFILE WILL THEN SECURE THE PANELS IN PLACE.
LEFT SIDE FRAME:

WE START ASSEMBLE THE FRAME BY BUILDING THE LEFT SIDE. REMEMBER, DON’T TIGHTEN ANYTHING TOO MUCH YET.

- 2 x three way hidden corners
- 5 x inside hidden corners
- 3 x L joining plates (1 is hidden from view, see next page)
- M6 x 10 button head screws for the plates
LEFT SIDE FRAME:

OUTSIDE VIEW SHOWING THE THREE PLATES. INSERT YOUR PANELS.

- THE BOTTOM T-SLOT PROFILE SHOULD SLIDE UP VIA THE INSIDE HIDDEN CORNERS. DON’T FORGET TO LEAVE A COUPLE MILLIMETRES OF EXTRA VERTICAL SPACE SO THE PANELS HAVE SOME EXTRA ROOM. THEY SHOULD NOT BE UNDER PRESSURE.
LEFT SIDE FRAME:

LEFT SIDE IS READY, INSIDE VIEW.
LEFT SIDE FRAME:

LEFT SIDE IS READY, OUTSIDE VIEW.
RIGHT SIDE FRAME:

NOW WE BEGIN THE RIGHT SIDE, EXACTLY THE SAME AS THE PREVIOUS STEPS FOR THE LEFT SIDE:

- 2 X THREE WAY HIDDEN CORNERS
- 5 X INSIDE HIDDEN CORNERS
- 3 X L JOINING PLATES (1 IS HIDDEN FROM VIEW, SEE NEXT PAGE)
- M6 X 10 BUTTON HEAD SCREWS FOR THE PLATES
RIGHT SIDE FRAME:
RIGHT SIDE FRAME:
RIGHT SIDE FRAME:

RIGHT SIDE FINISHED!
CENTER FRAME:

THIS AN IMPORTANT STEP. IT ALLOWS US TO INSERT ALL THE MIDDLE PANELS BEFORE WE CLOSE THE FRAME. IT'S BEST TO LAY THE FRAME DOWN FLAT (TURN 90º TO THE LEFT)

- GRAB YOUR LEFT SIDE FRAME. GRAB 6 CROSS EXTRUSIONS.
- INSERT ALL YOUR T-SLOTS ONTO THE INSIDE HIDDEN CORNERS, EXCEPT FOR ONE (BACK), WHICH WILL MOUNT ON TO A JOINING PLATE.
CENTER FRAME:

INSERT EACH PANEL SEPARATELY. REMEMBER, IT’S BETTER TO DO THIS STEP WITH THE FRAME LYING DOWN ON IT’S SIDE. THE CENTER EXTRUSIONS ARE UN-SUPPORTED AT THIS POINT.
CENTER FRAME:
CENTER FRAME:

GRAB YOUR RIGHT FRAME. MOUNT IT ON THE LEFT CENTER FRAME.
YOUR MAIN FRAME IS NOW READY. YOU CAN STAND IT UP VERTICALLY. AT THIS POINT YOU CAN CHECK IF EVERYTHING IS FLAT, AND RAIL HEIGHTS CAN BE CHANGED AND ALIGNED. IF YOUR FRAME IS NOT “STANDING FLAT” ON THE FLOOR, LOOSEN YOUR BRACKETS SLIGHTLY UNTIL YOU CAN FLEX THE FRAME INTO PLACE. MAKE SURE ALL PANELS HAVE 2MM TO MOVE. AFTER THESE STEPS, YOU CAN TIGHTEN ALL SCREWS.
DOORS:

Doors are mounted differently. There are two sets of profiles:

- 2 x Short Profiles (these have M8 threads on the ends)
- 2 x Longer Profiles (these have holes drilled through the sides of each profile).

Insert 4x M8 button head screws into the ends of the shorter profiles. Don’t insert all the way, leave some threads and the head out. The head of the screw will insert “inside” the slot of the longer profiles. Use a hex key “through” the hole of the longer profile to tighten the screw.

For the hinges: M6x10mm screws with drop-in M6 T-nuts. For the door handle: M5 x 12mm screws with drop-in M5 T-nuts. For the latch, two M6x12 cap head screws with drop-in M6 T-nut.
DOORS:
DOORS:
DOORS:
DOOR LATCH:
BUILD FINISHED!
RAIL LENGTHS

400 x 3 VERSION - A: 400MM, B: 898MM, C: 397MM, D: 338.5MM  (B: 448 FOR THE “STANDARD” VERSION)

500 x 3 VERSION - A: 500MM, B: 998MM, C: 497MM, D: 438.5MM  (B: 548 FOR THE “STANDARD” VERSION)

600 x 3 VERSION - A: 600MM, B: 1098MM, C: 597MM, D: 538.5MM  (B: 648 FOR THE “STANDARD” VERSION)

700 x 3 VERSION - A: 700MM, B: 1198MM, C: 697MM, D: 638.5MM  (B: 748 FOR THE “STANDARD” VERSION)
PANEL DIMENSIONS

400^3 VERSION - A: 414*302MM, B: 414*414MM, C: 351*351MM
500^3 VERSION - A: 514*302MM, B: 514*514MM, C: 451*451MM
600^3 VERSION - A: 614*302MM, B: 614*614MM, C: 551*551MM
700^3 VERSION - A: 714*302MM, B: 714*714MM, C: 651*651MM

The 2 horizontal B Panels need to have their corners cut out. You should remove a 10mm square from each corner of these panels.