

## Technical Overview For Manufacturing 15mm & 18mm Panel Doors

It is recommended a sub frame be fitted to achieve the best results.

### Tools required

|  |   |
|--|---|
| Tape measure                           | Large headed rubber mallet                      |
| Chop saw                               | Small off cut of scrap aluminium extrusion rail |
| 2 x 2" x 2" x 6' carpet covered batons | Electric drill                                  |
| Wheel Housing router JIG               | 3mm drill bit                                   |
| 2 x Solo clamps                        | Counter sink bit                                |
| Hand held router                       | Electric Screwdriver                            |
| Guillotine or sharp knife              | 8 x 1/2" counter sunk screws                    |
| 8' x 4' Carpeted Table                 | 10 x 3/8" Dome head flange screws               |
| Flip Stop Measuring Tool               |   |

Measure the opening height from on top of the floor plinth to up inside the "E" section top track, and the internal width aperture you have created in three places. Take the shortest height and the widest width. The number of doors will be decided by the customer's interior requirements.

### Cutting Formula – DOOR FORM available (via email) if required

Take the WIDEST aperture width and add 50mm per overlap i.e. 2 doors = 1 overlap, 3 doors = 2 overlaps etc.

Divide by the number of doors and subtract 32mm this equals the **PANEL CUT WIDTH**

Take the SHORTEST aperture height and subtract 43mm this equals the **PANEL CUT HEIGHT**

Take the cut panel height and add 5mm this equals the **SIDE STILE HEIGHT**

Take the cut panel width and subtract 59mm this equals the **TOP ALUMINIUM RAIL LENGTH**

Take the cut panel width and subtract 140mm this equals the **BOTTOM ALUMINIUM RAIL LENGTH**

### Manufacturing Instructions



1. Cut Swan Systems Stiles to length using a chop saw.



2. Cut Top and Bottom Ali Rail to length using a chop saw.



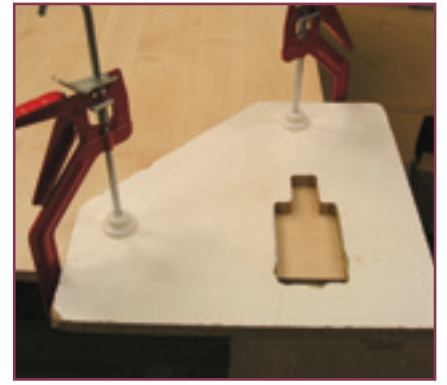
3. Using double sided adhesive tape, tape up the front of the top and bottom aluminium rails. The front of the rail is the SHORTER.



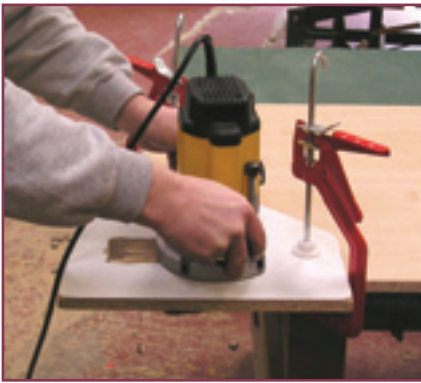
4. Apply two pieces of cut cushion pile to the back of the TOP aluminium rail, one to the left & right.



5. Set all these items to the side while you cut your panel to size.



6. Lay the panel face down onto your carpeted 8' x 4' worktable, attach your routing jig with solo clamps to the bottom right corner of your panel. (We can supply you with a jig if needed or you can make one of your own)



7. Using a hand held router, route out for the wheel housing.



8. Repeat at the bottom left of the panel. Routing complete. Lift the panel and slide the carpeted batons under the panel, still face down.



9. Using a rubber mallet, gently tap on the stile to the side of the panel, aligning the bottom of the stile with the bottom aluminium rail. (Use a small off cut as a guide).



10. Using a 3mm drill bit, drill 4 holes at equal spaced intervals up the side stile.



11. Counter sink these drill holes



12. Fix by using 6 1/2" counter sunk screws so they lay flush at the back of the stiles. Repeat the other side



13. Attach the wheel housing and bottom aluminium rail, first by using 3mm drill bit, then 6/16" dome head flange screws.



14. Repeat the other side and complete by adding two screws equally spaced along the aluminium rail into the BACK of the panel.



15. Attach the top aluminium rail by using your 3mm drill bit and dome head screws through the aluminium rail into the TOP edge of your panel in two positions equally spaced. Turn the panel over and lay it flat on it's back. The batons are no longer needed.



16. Using a Guillotine, cut square one end of the 55mm trim for the bottom of the door.



17. Mark the width of the 55mm trim with a pencil about 2mm wider than necessary. (This will allow a tight fit when you are ready to fix)



18. Apply a length of double sided adhesive tape to the back, top edge of the 55mm bottom trim.



19. Remove the yellow part of the double-sided tape of the 55mm trim and the bottom aluminium rail.



20. Attach the 55mm trim, applying plenty of pressure.



21. Cut the 25mm Top rail trim. Remove the yellow part of the double-sided tape already on the top aluminium rail and stick down, applying plenty of pressure.



22. Apply a piece of cut cushion pile along the top edge of each stile. This will enable the top of the door to glide within the ceiling fixed track, ensuring a smooth quiet running action.



23. Apply clear rubber buffers at the top and bottom of the side stiles.

Your panel door is now complete!

### ***GENERAL INFORMATION***

Swan Systems stiles must be stored in a dry, warm environment and laid flat. Completed doors must not be stored standing upright on their wheels or they may get damaged. Ensure the doors can be easily manoeuvred through tight stairways.

**Swan Systems Furniture Limited** Est. 1984

British Patent Award 2304361

**[www.swansystemsuk.com](http://www.swansystemsuk.com)**

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