



The Greenhouse

Construction Procedure

Prep:

1. Mobilise materials and store near build site.
2. Prepare materials for construction:
 - a. Cut timber to length.
 - b. Strip pallet sheathings from their frames.
 - c. Cut interior fabric to length.
 - d. Cut roofing sheets to length.
3. Assemble exterior truss at location, solidify connections and grounding points.
4. Obtain final skeletal measurements to be used in framing and roofing.

Rough Framing:

5. Construct rectangular frames for wall B, C, D, F, G & H. Frames C and G should be built with 4 horizontal bracing beams, while B, D, F and H should be built with 2. Consult attached floor plan for wall locations.
6. Construct frames for walls A and E. Consult attached frame diagrams.
 - a. Wall frame A should allow space for two, 1-metre-wide doors, swinging inside and secured to foyer element.
 - b. Wall frame E should allow for a double door, split by its corresponding truss leg and swinging out.
7. Lay stripped pallet wood horizontally, ensuring order and fit before securing each piece to the frame. Gap tolerance of 1 cm between pieces. Complete all walls, minding door space.
8. Lay each wall flat, arranged in with each bottom angle placed at the corresponding connection point on its neighbouring frame. The interior shape should be a 2D representation of the completed 3D octagon.
9. Drill holes at connection points, large enough to comfortably fit jubilee clips. Each wall should maintain no less than four connection points horizontally and vertically.
10. Raise walls, two at a time. Start with walls A & B – attach walls together vertically first, then string horizontal attachments from wall B, to the truss. Maintain physical support on walls A & B until C & D have been raised and securely attached.
11. Repeat step 10 on walls E – H.
12. Perform stress tests on all walls.



Roofing:

13. Lay out all support beams side by side. Drill holes at pre-measured connection points. Each beam's point placement should be equal to the others.
14. Begin beam placement. Run jubilee clips first through top hole in beams and around the nearest main column of the raised centre tri-truss which runs across the square. Repeat on bottom hole, and around the lower, exterior trussing square. Repeat until first side is done.
15. Repeat step 14 on the opposite roof slant.
16. Begin to lay roofing sheets. Using rubber sealed roofing nails, secure the roofing sheets to their support beams. Be sure each sheet is taught in its free space between each beam, and that each sheet overlaps its neighbour as well as extends well over the walls, not allowing for any water leakage.
17. Once confident in roofing sheet security, lay the sealant strip along the peak of the roof. Be sure to point the strip as much as possible, sealing the sheets of the two roof slants together, so as not to allow any water leakage or build up. This entails ridding the sealant strip of any dips or ruts that may catch water.

Entrances/Exits:

18. Begin door placement. With a team of three, mount doors on their frames.
 - a. Ensure adequate support by the truss for the wooden frames before mounting doors, adding additional supports where necessary.
 - b. Ensure doors swing fully and without impediment by truss or frame. Adjust where necessary.
19. Move foyer element into place. Foyer element should enclose both entry doors, as well as maintain the functionality of its separate entry door. Check that the foyer element does not impede any interior door.
20. Utilising exterior L-braces, secure the foyer element to wall A. There should be no less than 3 connection points on each side.
21. Perform stress test on foyer element.

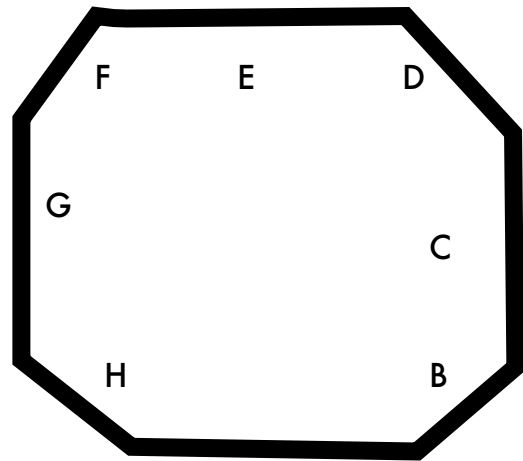
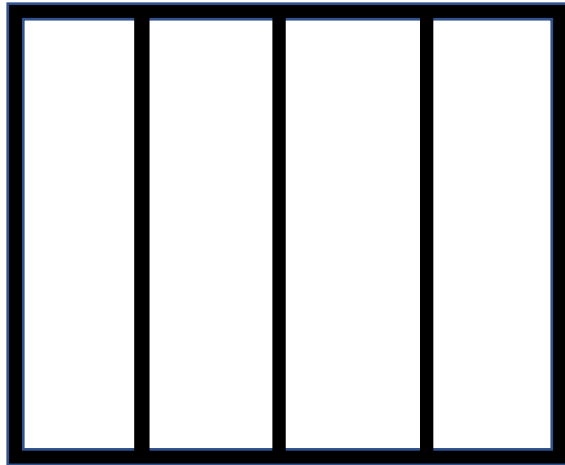
Sealing and Painting:

22. Begin interior sealing process. Using wall screw attachments, arrange plastic sheeting and fabric in prearranged formation. Make sure free space is taught, and covering any larger spaces in the wall panelling – including the top triangles of free space created by the slant of the roof.
23. Ensure any and all design elements are fixed in their prearranged place, and any final stress tests and design changes have been completed.
24. Begin painting, ensuring proper ventilation and light.



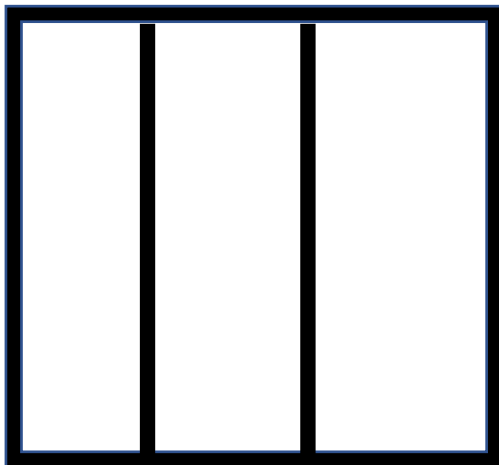
Diagrams:

Frames C & G



A

Frames B, D, F, & H



Frames A & E

