

**SELF-BUILD
INSTRUCTIONS**

OUR LARGE CAPACITY STORAGE SOLUTION FOR EXPANDABLE CARD GAMES

INFINITY

B O X



TESSERACT
GAMES

THINGS THAT SHOULD HAVE BEEN INSIDE YOUR PACKAGE

- 1 black magnetic flap box (flat packed)
- 4 laser cut MDF sheets
- 6 Bulldog clips (free stationary! yay!)
- 1 Instruction sheet
- Packaging - please recycle (or better, re-use) as much as you can. Bin the silica gel packets if it was included.

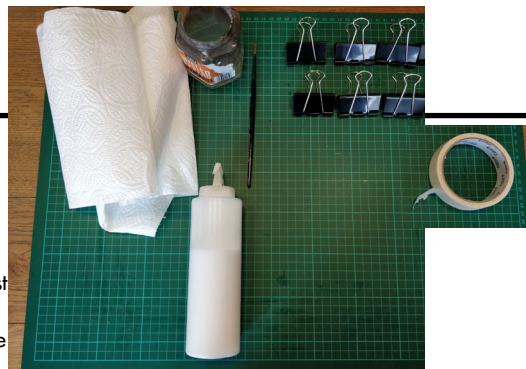
If anything is missing, please get in touch via Etsy or via email tesseractgamesuk@gmail.com

PLEASE READ THESE INSTRUCTIONS ENTIRELY BEFORE STARTING

- "This looks complicated" - I promise, it's not. I have tried to be thorough in my explanation and provide lots of pictures so it extends across quite a few pages because of this. The insert is a really simple construct.
- "This MDF looks flimsy" Whilst the 2mm MDF is quite thin, when combined with the cardboard box the result is actually quite strong.
- MDF is susceptible to warping slightly with changes in humidity. This cannot be avoided. We have included silica gel packets to mitigate this during shipment but you might find that leaving your stacked MDF sheets out with a bit of weight on top of them for 24 hours will help before you start building. You can still make the box if it isn't perfectly flat, it's just a bit more fiddly, have faith, that's what masking tape is for :) !
- Every piece of the MDF box insert is unique and you cannot put the wrong piece into the wrong slot. You can also use either side of any piece though we suggest the side with the least laser burn marks should be the side showing.
- You do not need cutting tools to remove the MDF pieces. Just pop them out with your finger. If there is a bit of wood preventing a smooth connection between 2 pieces then a light sanding or shaving will help but in general this shouldn't be required.
- Try dry-fitting pieces together before gluing so that you get a good idea of how each piece fits. This might add time to the build but is often worth it.
- Excessive force will not be the solution at any point during this build.

THINGS YOU ABSOLUTELY NEED TO BUILD THIS BOX

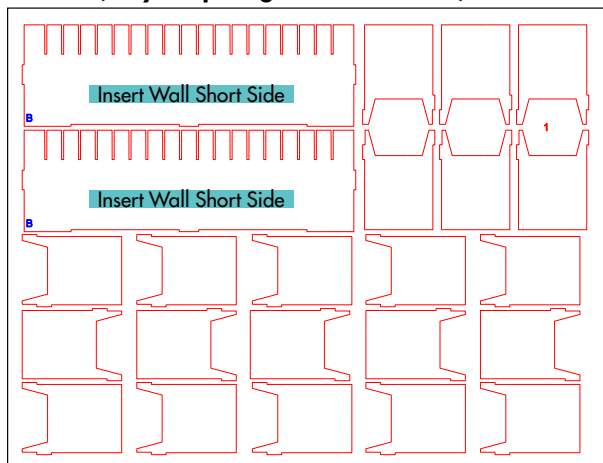
- Good quality PVA or strong wood glue, ideally with a thin 2-3mm dispenser tip, a bit like a ketchup bottle or similar. Don't be tempted to use a glue you'd give your kids, get the good stuff.
- Masking tape (Ideally low tack)
- A flat surface and a mat or something to protect your table (PVA Glue is water soluble and can be removed with a bit of elbow grease and a damp cloth but better to not get it everywhere in the first place as my wife keeps telling me!!)
- About 1 hour building time + few hours drying time in between steps (and ideally over night once finished)
- Some patience :). Don't start building this if you are tired ;).



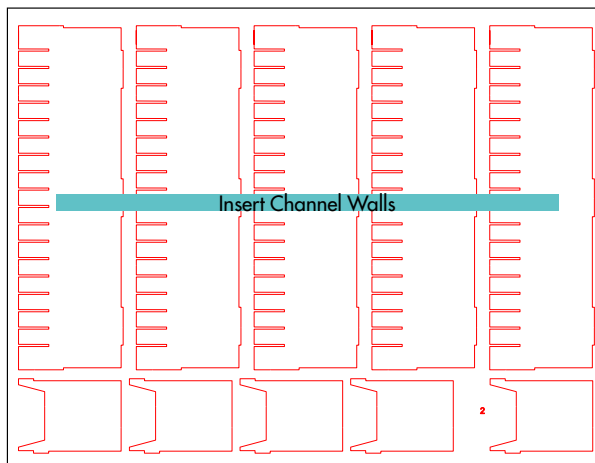
THINGS THAT WILL MAKE LIFE A BIT EASIER

- A paint brush to level out glue (large brush is good, around 8mm width is what I use)
- A pot of water to clean your brush.
- Kitchen towel or cloth to wipe up excess glue, soak excess water from your brush and clean up mess.

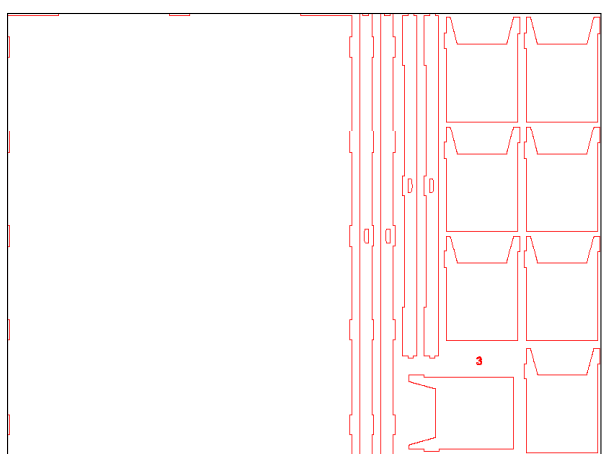
Sheet 1 (maybe split again into 2 sheets)



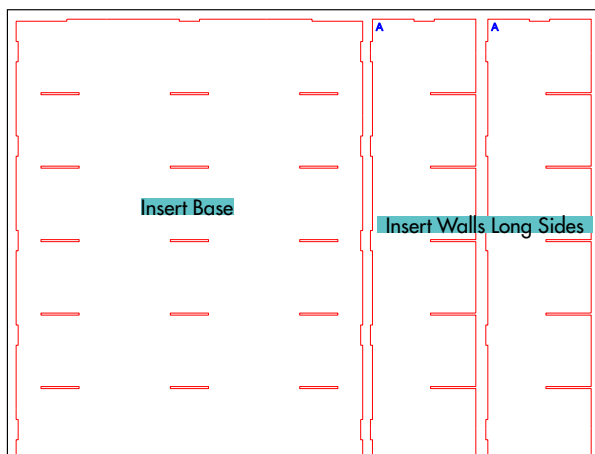
Sheet 2



Sheet 3

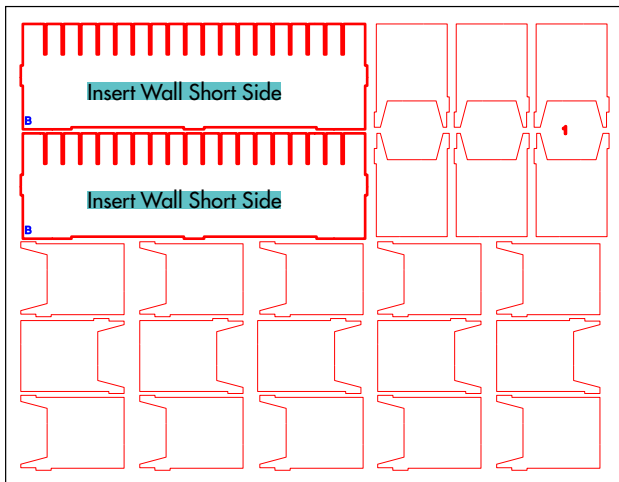


Sheet 4

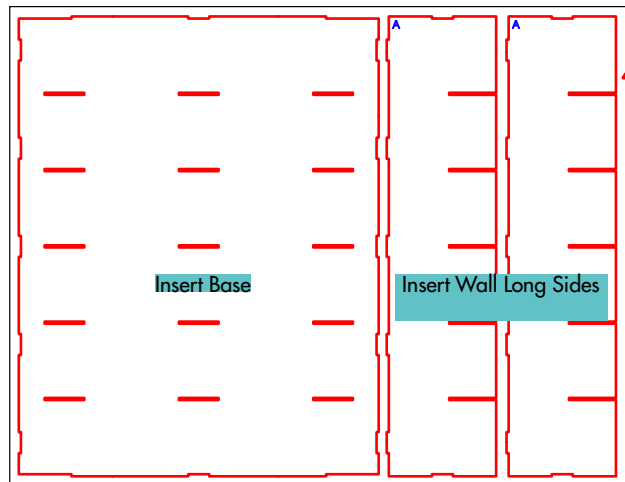


LET'S BUILD! INSERT FRAME

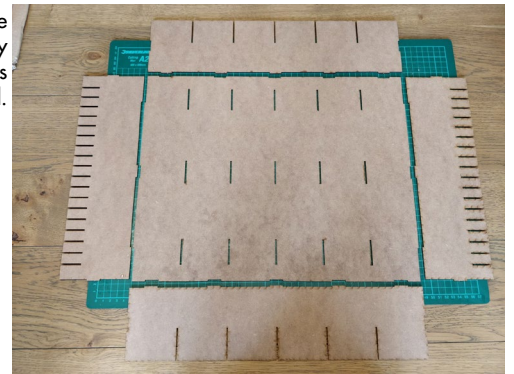
Sheet 1



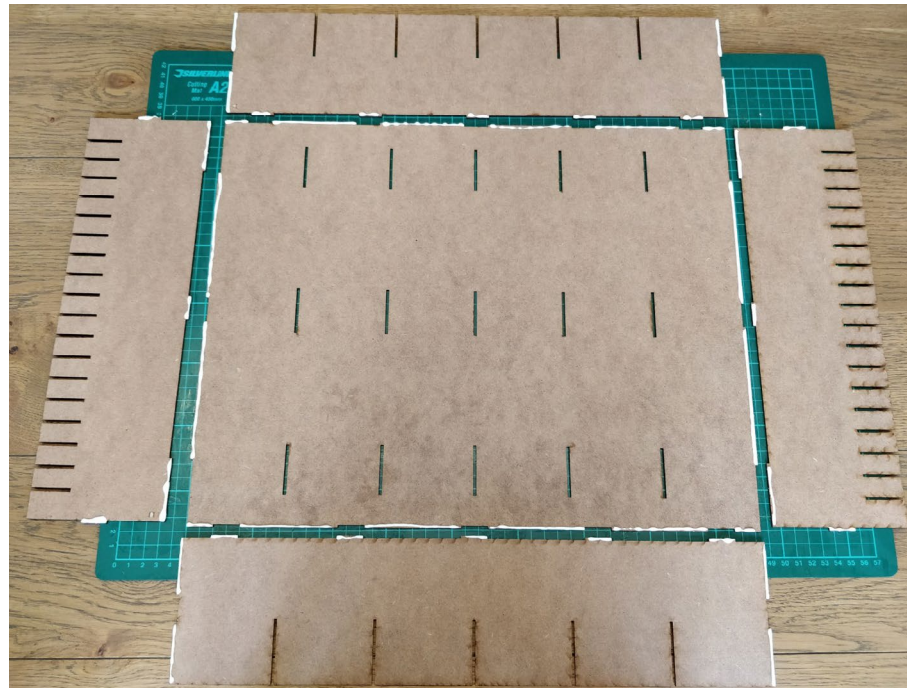
Sheet 4



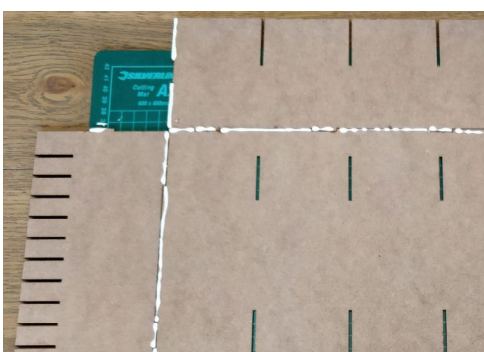
1. Lay out the pieces highlighted in bold red line above. The walls for this part may or may not have the letter A and B etched on them in the corners (sometimes the etching doesn't come through very well). It doesn't matter which side you use for any of the pieces but I tend to face the sides with less laser burn marks upwards as these will be the ones visible once constructed.



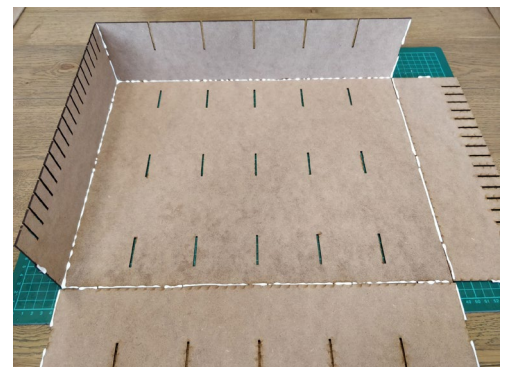
2. Apply PVA glue on all indicated locations. Better to be generous than to skimp here.



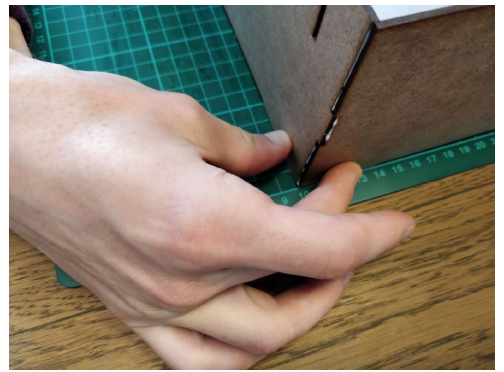
3. Nudge the pieces closer to the base plate.



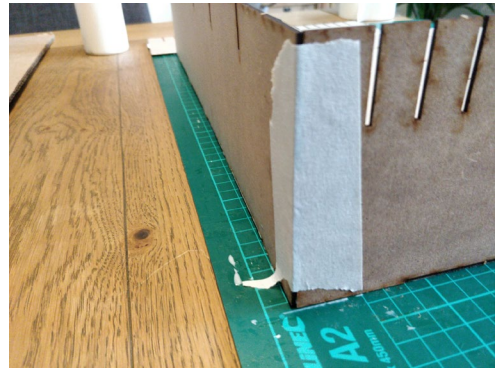
4. Starting with the left hand side and top piece, bring both up to meet at the corner.



5. The most important connection for these walls at this stage is the corner so pinch here, with downward pressure. Don't worry too much if the connection is a bit loose further along the wall. Get the corner connection sweet. Then wipe off excess glue.

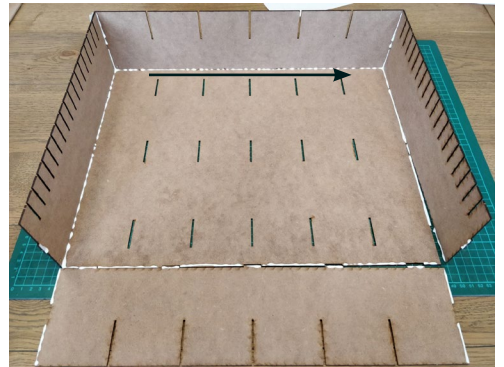


6. Place some masking tape on the corner to help hold it in position, like this.

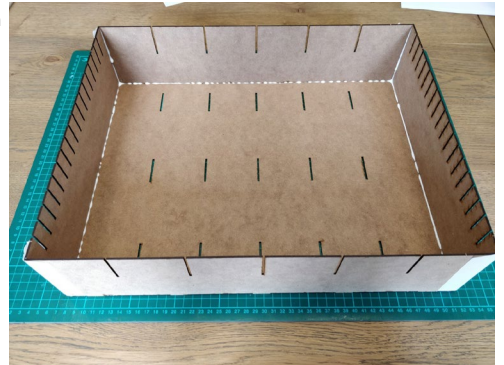


7. From left to right, bring the top wall section into the relevant base sheet slots. Repeat the previous step with the right hand side wall piece. Again, get the corner connection sweet, pinch at the bottom with downward pressure as in step 5 and apply masking tape to hold. You can go back along the top wall sheet now and bring it back on the base sheet if it has come away.

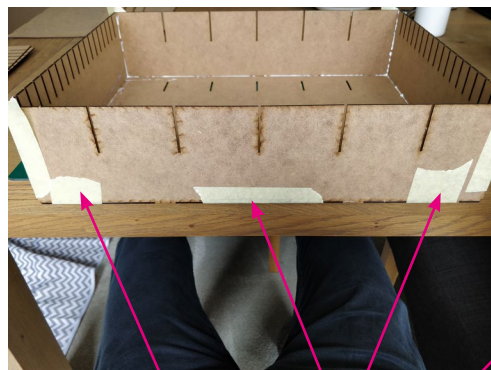
Repeat this step for the remaining wall.



8. Once all walls have been made you will have this. Again, pinch with downward pressure on all corners as in step 5. Then adjust the walls so they are in contact with the base sheet. Now we'll secure the wall pieces in the middle with tape.



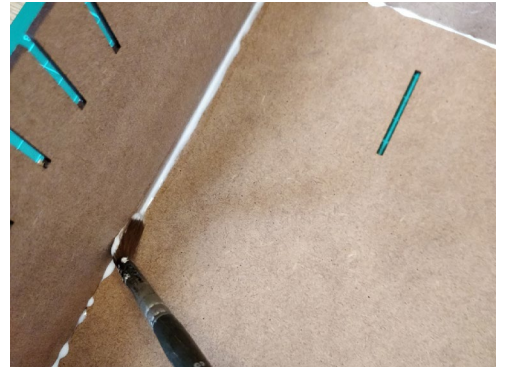
9. Use a vertical strip of masking tape just inside of the corners and a horizontal or vertical strip in the middle. You want each strip to overhang and stick to the underside of the frame so the tape brings the connection point together. If you slide the whole box off the side of the table to do this it helps as you can access the underside easily. If you apply light downward pressure whilst sticking the tape to the bottom plate it will help bring the pieces together too. Wipe/smooth over excess glue that seeps out.



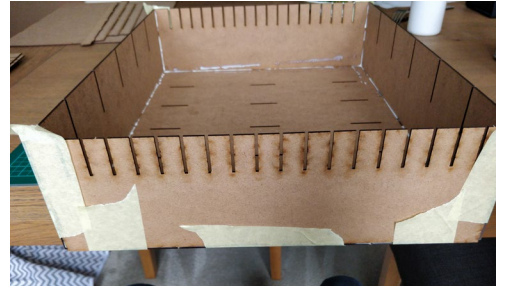
Slightly overhang the edge of the table to apply these strips of masking tape.

Underside

10. Now we have our insert frame, either grab your paint brush, dip it in the water and then dab it on the tissue paper to absorb excess water (you still want it damp as it helps smooth the glue) or use your finger, and smooth out the glue on every join. Glue is welcome, just get it in any gaps and smooth it out so its all the way along the join.



11. Add more tape as per step 9 if there are any large gaps where the walls and base plate meet. It doesn't have to be a perfect join, we'll add additional glue later to reinforce, but any gaps larger than 1/2mm would be best to have some extra tape to close up the gap.

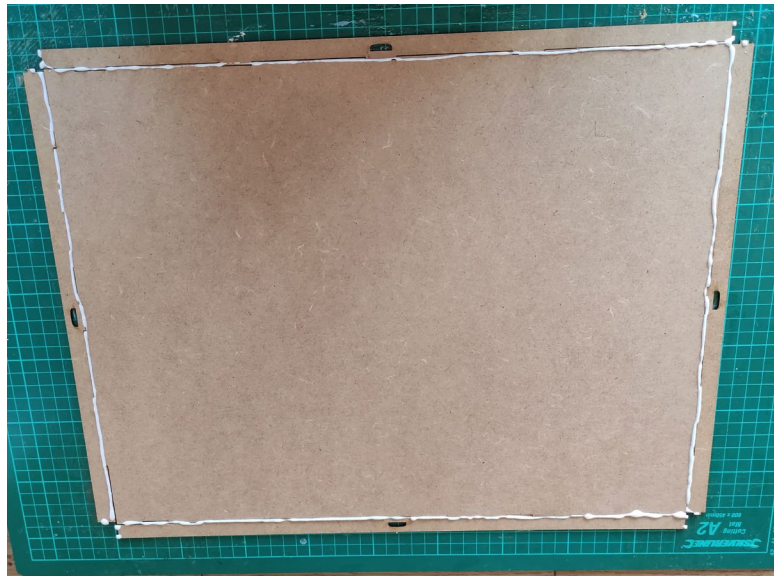
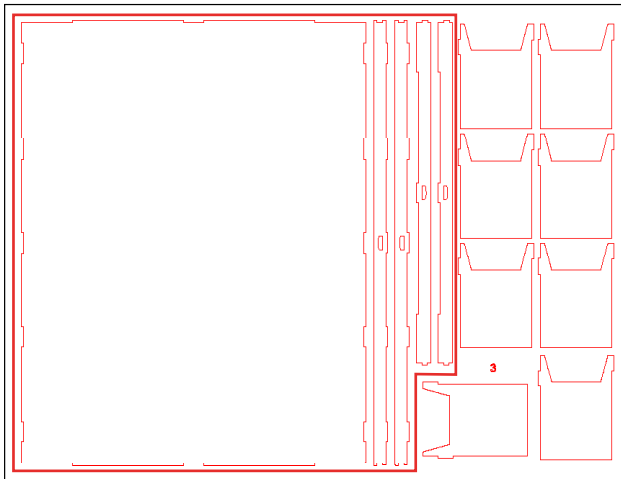


12. Place this aside to dry, after about 10 minutes go back and pinch the corners again and apply light pressure to the wall/base plate joins. Do this again after 30 minutes, you're just helping seal any gaps. As mentioned in the previous step, once the glue is close to dry, add another, generous application along all the seams. Lightly run your paintbrush or finger over it to push it into any remaining gaps and smooth it out. A thick application of PVA/Wood glue can sometimes take a few days to cure and go completely transparent so don't worry if it looks like it isn't drying, just don't put anything near the glue until its fully cured (the internal walls are an exception to this, they can go 'near' the glue).



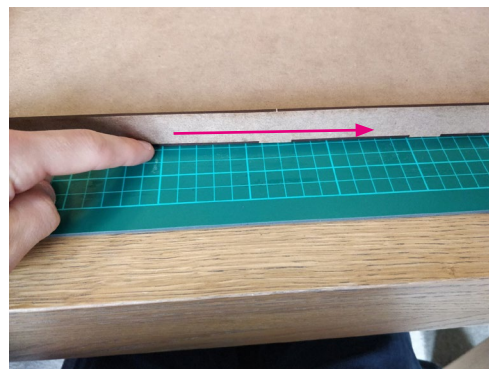
LET'S BUILD! TOP TRAY

Sheet 3



13. Now we repeat all the above steps with the box tray. Same method - pinch at the corner first and apply masking tape to hold the corner. Run along the wall bringing it together to the tray base and then raise the right hand wall and tape that corner. It's a bit more fiddly with the tray so be patient with it.

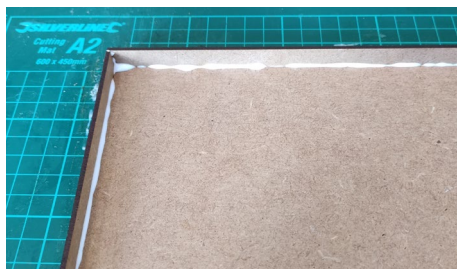
14. Run your finger along the outside to remove excess glue and apply light pressure to make the connection between the 2 pieces. Add masking tape like we did for the main frame, so it covers the side and goes underneath the tray to bind the two pieces together. You might need a few of these around the tray but like the frame, we find a vertical piece of tape at each corner and a horizontal strip in the middle normally does the trick.



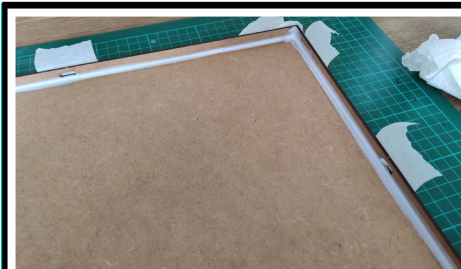
Again, once all walls are up, lightly brush the glue smooth and set it aside to dry.

CHECK FOR A GOOD JOIN ALONG ALL CONNECTION POINTS AND RE-ADJUST IF THERE ARE ANY BIG GAPS. IF THE JOIN IS NOT GOOD AT THIS POINT YOU MIGHT FIND THE TRAY SITS A BIT HIGHER WHEN THE BOX IS FINISHED AND THE LID WILL HAVE TROUBLE CLOSING.

Return to it intermittently to pinch the corners, helping the joins to bond.



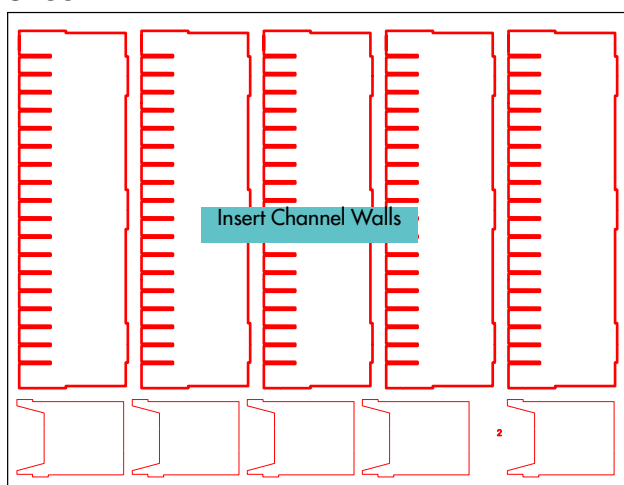
More pics.



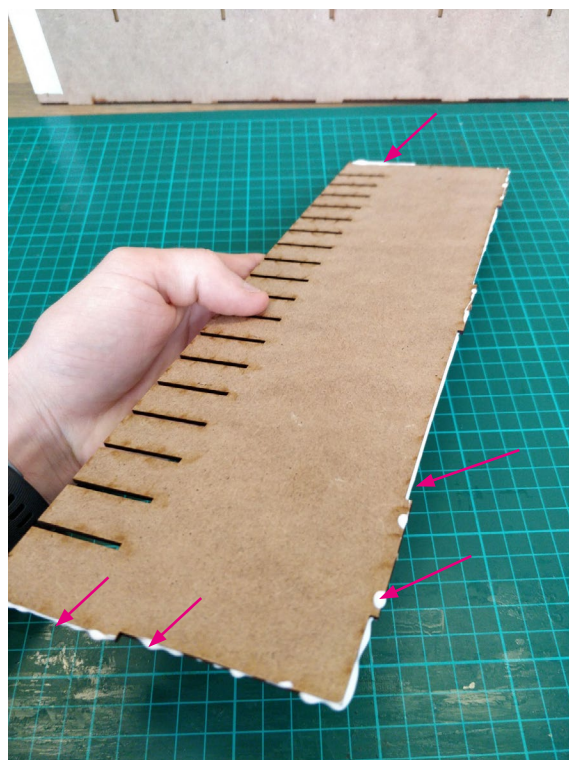
14.1. As the tray is handled nearly everytime you open the box it is worth adding an additional application of glue to the inside connection points of the walls once steps 13-14 are finished and dry. Apply glue generously as shown above and lightly run your paintbrush or finger over it to push it into any remaining gaps and smooth it out. A thick application of PVA/Wood glue can sometimes take a few days to cure and go completely transparent so don't worry if it looks like it isn't drying, just don't put anything near the glue until its fully cured.

LET'S FINISH UP! INSERT CARD CHANNEL WALLS

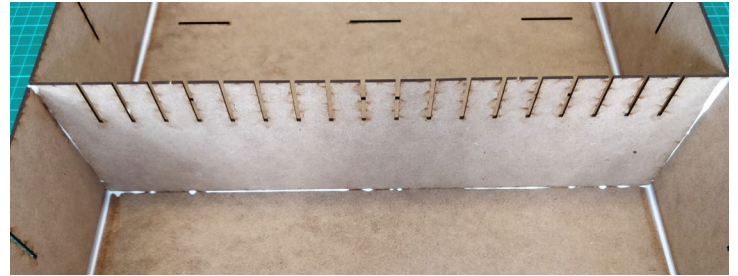
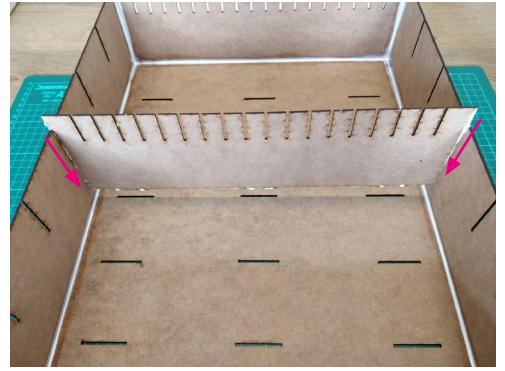
Sheet 2



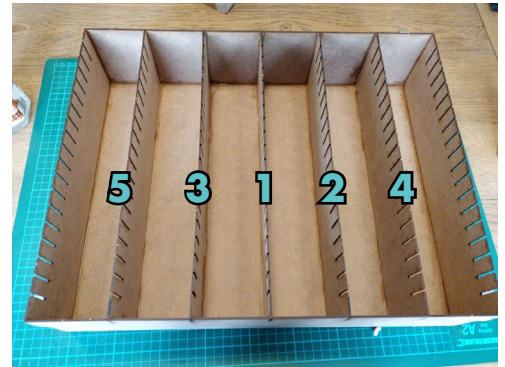
15. The insert frame should have had about an hour to dry before starting this step. You can take any one of the five card channel walls and apply glue to these locations.



16. Starting with the middle section, hold the wall piece horizontal and drop it down into the slots. Try to keep it horizontal as you lower it as this will help the tabs slide in and prevent the insert walls bending. Once its close to the bottom you might need to handle the wall piece in the centre to push it into the base tray slots. sometimes they need a firm push down. Double check the sides are correctly aligned. There can be a bit of a tight fitting feeling to these parts but don't worry, if you allowed the insert walls to dry they can take it.



17. Repeat this step for each channel wall in the order 1 > 5 as shown in this picture.



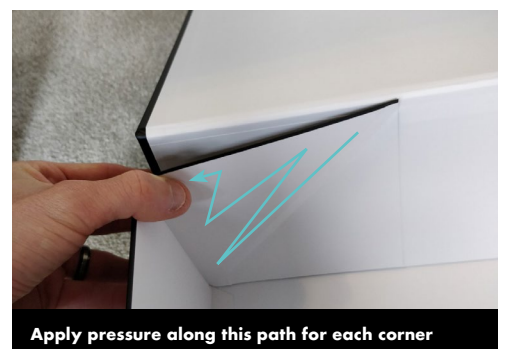
That concludes the construction of the insert! well done. Grab a brew and give it about half an hour before starting the next step. Please check your local recycling for whether they can process MDF or not.

LET'S PUT IT ALL TOGETHER!

18. Lay the Magnetic flap box flat on the floor. Practice lifting a side wall up so you can see how it is made.

When ready, remove the 4 white sticker pads and bring the left hand side wall up. You want this wall to stand as far up as possible. Try to apply pressure from the inside of the sticky section to the outside, like you would apply a smartphone screen protector.

Quickly check that the MDF insert fits into the constructed box by keeping it level and lower it down into the box a few centimetres. Due to tolerance in the box it might be a tight fit, it might not. A tight fit is OK, but if you cannot get it in with a bit of a wiggle see if you can adjust the box side walls further out so there is more space (This might mean pulling the adhesive parts away, don't worry we can reinforce later in the designer notes sections if this happens).



19. Place the box on a table with the lid hanging down the side, like this.

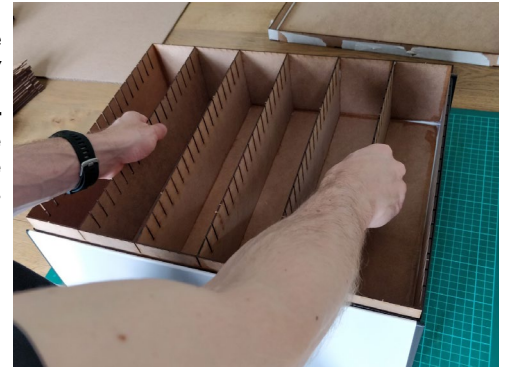
Apply pressure along this path for each corner

20. Remove all masking tape from the, now built, MDF insert. You can leave the tape on the tray if it needs more time to dry.

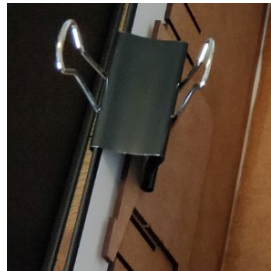
21. Apply glue in these locations inside the magnetic flap box. Apply the glue 1/3 of the way up the SHORT side walls - otherwise you'll get glue seeping up into the divider slots of the side walls (if this happens in the next steps just wipe it away with your brush)



22. Drop the card channel insert into the box holding it at the two outmost card channel walls. Apply light pressure, working the insert down evenly. As you reach the bottom it will become more difficult - apply a more pressure, don't worry, the box can take it, I've sometimes put some of my body weight to get it all the way down, just make sure you keep your hands as shown in the picture. **You can check the insert is all the way down by placing the tray on top - it should be level with the top of the box all the way around. If not, take the tray out and try applying a bit more pressure to the insert. Either way, take the tray out for the next step.**



23. Using the supplied bulldog clips attach one to each location shown in the picture (you will have to fold the metal handles back on themselves to get the bulldog clip ready). The clip should touch the MDF insert and pull the cardboard box together. If you find it doesn't reach use a divider in between as shown in this picture. You **MUST** have the magnetic flap lid edge at the side of a table to do the lid side.



24. Leave the box to dry for 2-3 hours.



25. Remove all the bulldog clips and slot the tray into the box. When folding the lid over if the magnetic flap has trouble closing completely lift the lid and bend the magnetic flap in on itself so it touches the white paper of the lid. This will help it close fully and enable the magnets to touch when you try again. **If it still isn't closing correctly, close the lid completely and lay the box the side with the magnetic flap face down for twenty minutes.**



26. To finish I add a generous line of glue to these locations, on both short sides. This step isn't necessary, but will greatly strengthen the overall integrity when filling the box to capacity. Again, a generous application will take a few days to fully cure transparent and its advised that you have the box standing on its side (still empty!) as shown in the picture whilst this dries so it can seep down into the joins. After a couple of hours on one side you can flip the box to do the other side without fear of the glue running in the wrong direction. It's a fair amount of time waiting for each side to dry individually but its important so please be patient :). I like to do the last side just before bed and then the box should be good to fill in the morning.

That's it! Finished! Start filling it with your favourite game and if you want to start customising it you can use a website like avery.co.uk to print custom vinyl stickers for your box (they ship internationally). Thank you for buying an Infinity Box!

DESIGNER NOTES

The box has been stress tested when full of cards and the combination of 2mm MDF and 2mm cardboard is sufficient, but the box is not designed to be stored vertically so always keep it on its base.

Try to remember not to grab the tray from its side walls when it has items in it otherwise the walls might snap off under the weight (even after we added that extra glue!). We always use 2 hands, one to grab each short side of the tray and then lift.

The wooden dividers can be used in slots adjacent to a slot channel that already has a divider in it. We sell additional dividers on our store.

Any questions or issues feel free to contact me at tesseractgamesuk@gmail.com or via Etsy. We've big plans for the Infinity Box range, stay tuned! :) Feedback always welcome.

26. **No glue on this side !! Otherwise the lid won't open!**

