



TG3D Street Library box assembly instructions

The TG3D street library is a strong, robust box which enhances you community engagement.

The box is constructed of “C/D” grade 12mm plywood. The “C” side (the better quality side) is on the outside of the box to simplify painting. There will be marks and occasional top surface knots on the material which will not affect the functionality or durability of the box. Plywood is dimensionally stable and the box should slot together however a tiny bit of “encouragement” might be needed. The CNC cut is designed to be tight to assist in excluding water from the joints..

The box is machine cut using a “Computer Numeric Control” (CNC) router. This provides accurate joins and makes the boxes simple to assemble. It is screwed, not nailed, for strength, durability and water resistance. The screw holes are pre-drilled.

The kit is supplied with sufficient screws to assemble the box and fit the hardware supplied.

Please read this instruction completely before commencing assembly.

Tools required.

- #2 Phillips head screwdriver. A power screwdriver will make this job faster however make sure you turn the torque settings down. This also allows you to “set” the screws more accurately. Flush with the top surface is sufficient.
- #1 Phillips head screwdriver. This is used for the screws that hold the acrylic windows on.
- Sandpaper. 80 grit should be sufficient. Use this to sand the completed box prior to painting. A small orbital sander works well if you have one but hand sanding won't take long. I give the external surfaces a basic sand before dispatch.

Parts

The box is supplied with the following parts

- Base
- 2 sides - there is a left and a right side. The front edge is the larger edge
- Back
- Top
- 2 doors – these are different to each other. The recessed sides are the inner sides and hold the acrylic. There is a hole near the inner edge to hold the handle. There is also a small “pop” hole on the inside lower edge. This marks the position of the magnetic receiver plate and is oriented to the bottom of the box
- 2 Acrylic window panes – there are 16 4G x 12mm screws.
- 2 305mm piano hinges – with 24 stainless screws in 2 packets.
- 1 magnetic catch with 2 catch plates – they use 4x of the 4G x 12mm supplied with the acrylic panels
- 35 6G x 20mm screws – there should be some spare! 2 of them are used to secure the handles.

Assembly

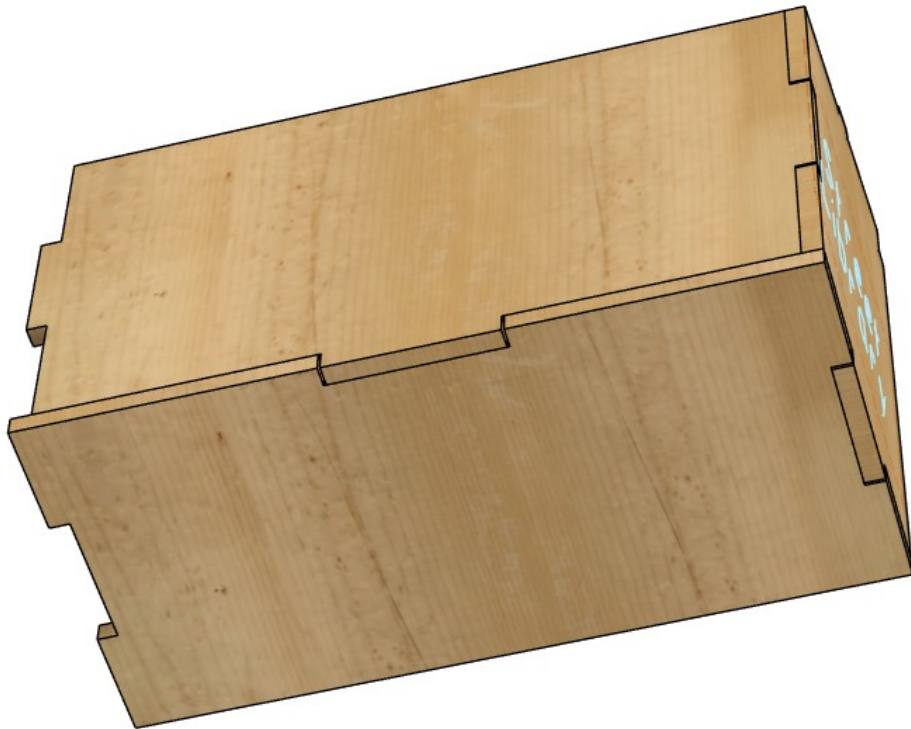
Start with the base. It has 3 notches in its profile.



Take the left hand side (as shown) and push the tab in the side into the base. Make sure the side is pushed right down. Place a screw into the “tab” on the side and loosely tighten it. Turn the base and side onto their back edges and whilst aligning the side to the base, put the 2 screws in the base to secure the side.

The next step is to add the back to the library. Flip the base/side onto the “front edge” and insert the base. The bottom tab on the back engages with the notch on the base. The tab on

the left hand side (looking from the front of the box) engages with the left hand side.



Put 2 screws into the tabs on the back making sure the back is firmly engaged into the base and side. Next step is 2 screws in the side that screw into the back and 4 screws in the base that connect to the back. At this point you can tighten all screws inserted so far. The 3 sides should also be getting quite rigid

Next step is the right hand side (RHS).

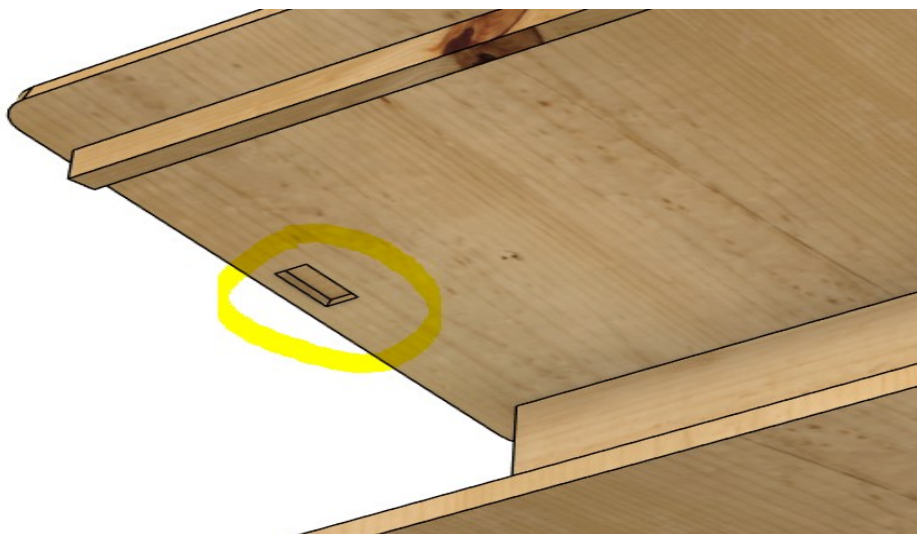


Again, start by screwing the tabs in the back (to the right hand side) and the base (again to the Right hand side). Follow this with the 2 screws in the base up into the RHS and the 2 screws in the face/rear edge of the RHS into the back.

Follow this with the door jamb. There are 2 screws, one in each end. Make sure the jamb is flush with the sides and sitting down in its notch. You should be able to tighten these screws flush.



The next piece is the top which has 2 locating slots that engage with the mini tabs on the top of the sides. As shown below



Fit the top and check it is sitting down on the sides and touching at the back. There are 13 screws in the top – this is done to assist in stopping water ingress. You can tighten them all at this point. The basic box build is now complete. Have a bit of a look to check you haven't left out a screw.

The last step before painting is to screw the handles onto the doors (unless you are planning to paint the handles a different colour). The handles are pre-drilled and use the same screws as the box. They are designed to be oriented vertically. If you want, you can put your own selection of handle on the box

Painting

TG3D recommends that you paint the library at this point. Give it a light sand using 120 grit and then paint it using a quality exterior (outdoor) paint in colour(s) of your choice. Paint the inside as well as both sides of the doors. Be generous about painting around the joints in the box to help keep water out.

Doors

Once your paint is dry, you can assemble the doors to the box. The first step is to put the windows into the doors. Remove the protective covers on the windows and place them in the recesses in the inside of the door. There are 6 4G x 12mm screws in each window. Add the striker plate for the magnetic catch at this time using the small location hole below the recesses for the acrylic. It uses the same screws as the windows.

The hinge mounting holes are pre-drilled. The screws are in the packet with the hinge.. Select a side and place the hinge on using the top and bottom screws. They should be tight but be careful, these are only small screws. You should then be able to offer up the door and again, put the top and bottom screws using the pre-drilled holes. Repeat this for the other side. The doors should close with about 1mm of clearance between them. Put the rest of the screws into both hinges.

At this point the box is assembled. Congratulations! Check all the sides for missing screws, there are 50 of them! I include a few extra screws so don't be concerned about having 3 extra.

Catch

The last job is to fit the catch. Use the screws supplied. Close one of the doors and place the catch so it is approximately central and the striker plate on the closed door is engaged. Screw the catch to the base putting the screw approximately in the middle of the slot. This will give you some adjustment. Holding the catch with your fingers, open the closed door and

put the other screw in.

Your street library is now complete

Mounting

There aren't many rules about mounting this box. Some suggestions include

- Screw it to your fence through the back.
- Get a "wing split" treated pine post, concrete it into a hole and again screw through the back to the post

The library is quite strong but if you are worried about kids hanging of it, a shelf support bracket underneath it would be sufficient.

If you enjoyed making and using this street library, please give me a like or follow at

<https://facebook.com/tg3ddesign>

I'd appreciate a review, if possible, as well as a few photos? 😊, :

Thanks,

Tony