



pTank Classic & Peninsula Build Guide Rev 0.6 13MAY2022

www.ptank.co.uk

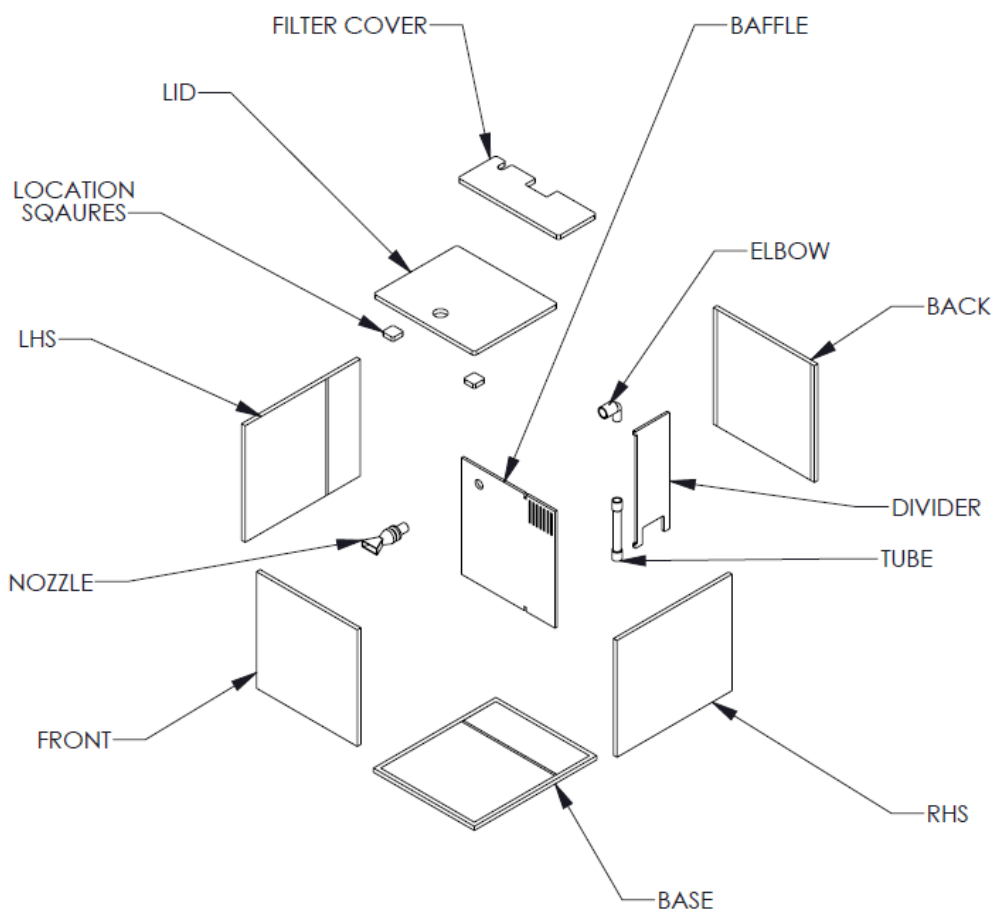
@pico.tank

Introduction

Thanks for the purchase. This short summary guide aims to cover the basic construction method to ensure you get a great looking tank. For any queries or extra help, please contact sales@ptank.co.uk

Contents

Classic/Peninsula Kit Contents



Also Required

Adhesive – Industrial grade (Tensol 12, Anglosol 1200, Extru-Fix, Scigrip) solvent adhesive recommended for best results. Consumer grade (Loctite All Purpose) can be used on the smaller tanks, but is not recommended for larger tanks and should be used at own risk.

Supports – The uncured joints must be supported during curing, a small Angle Plate and magnet works best, but tins of beans can also be used. Heinz or unbranded perform equally well.

Masking Tape – This helps to hold the corners of the tank as the parts cure.

Scraper or Blade – A razor blade is helpful for the removal of stray adhesive from the masked faces. Do not use on unmasked faces, as scratching can occur.

PPE – Gloves/Goggles depending on the adhesive in use, see Safety section.

See www.ptank.co.uk for links for all recommended products and accessories.

Safety

Ensure the instruction sheet & safter sheet is thoroughly read for the adhesive to be used for construction of the tank. Industrial grade adhesives may require more safety precautions than consumer grade or off the shelf adhesives. All bonding should be completed outdoors or in a well ventilated area, whilst wearing protective gloves.

Further information for pTank supplied adhesives can be found here:-

Low Viscosity (Extru-Fix)

https://www.anglo-adhesives.co.uk/wp-content/uploads/2018/05/extruded_acrylic_adhesive.pdf

Standard Viscosity (Anglosol 1200)

https://www.anglo-adhesives.co.uk/wp-content/uploads/2018/05/acrylic_sign_bonding_cement_1200_adhesive.pdf

Assembly Notes

Practice – Use the test pieces provided to practice getting a secure clear joint. Leave some to use as a straight edge later on though!

Adhesive Volume - A good joint is easier to achieve by Applying a little more adhesive than you think may be required. Excess can be removed when partially cured, from the masked sections of the tank.

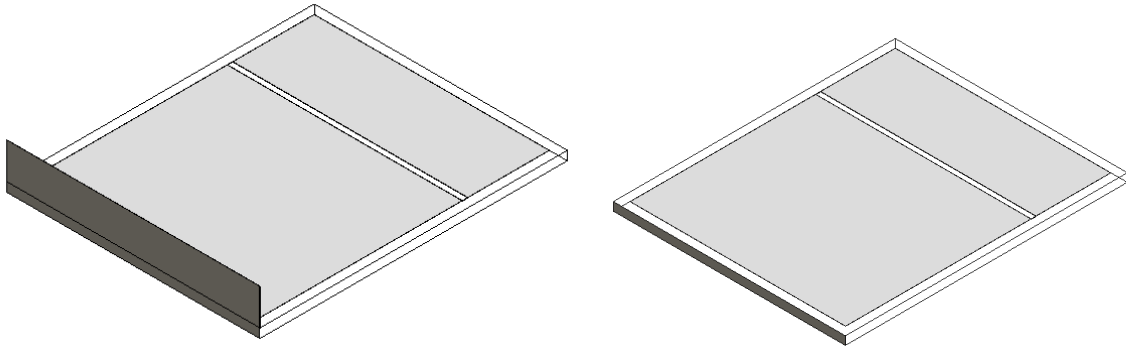
Work Area – A flat board (large chopping board) or table is very helpful to provide a flat working surface, cover with paper to ensure stray adhesive doesn't destroy that nice oak workstop!

Masking – The tank parts are covered in protective film during manufacture and the portions that can be peeled away are laser etched, so the main faces of the tank are protected from stray adhesive.

Bowing – Acrylic absorbs small amounts of water, causing natural bowing of the wet side. Please ensure all joints are filled with enough adhesive to withstand any natural movement of the tank. Failure to create strong void free joints can result in weak joints that may split over time. A good strong joint should be clear, with minimal bubbles.

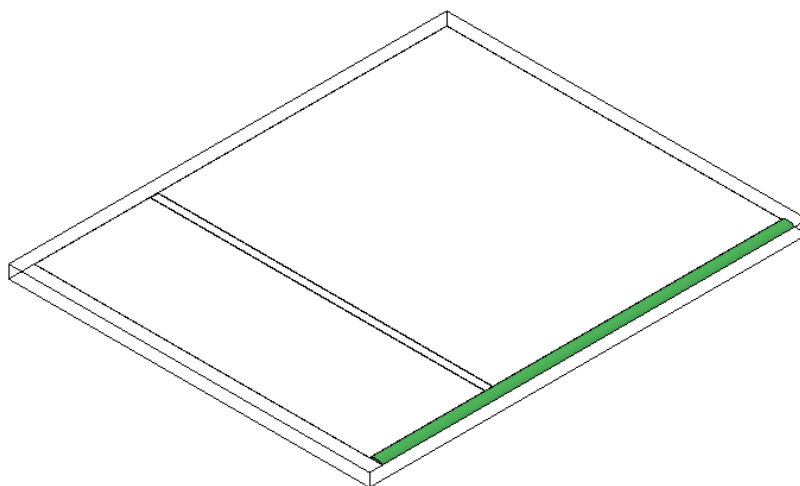
Pico Tank pTank Classic & Peninsula Build Guide v0.6 www.ptank.co.uk

If you are worried about getting adhesive on the edges of the cut parts, you can pre-mask these using masking tape. Run a length of masking tape along the edge and trim using a sharp craft knife or razor blade, so the tape is the same width as the cut edge (5mm).

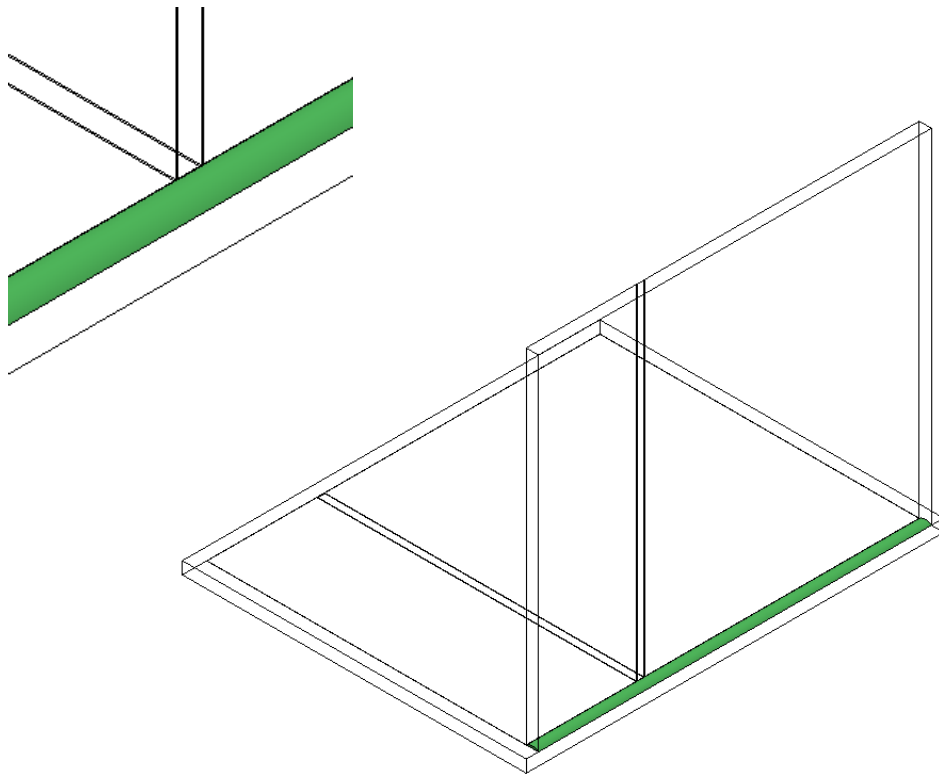


Assembly Procedure

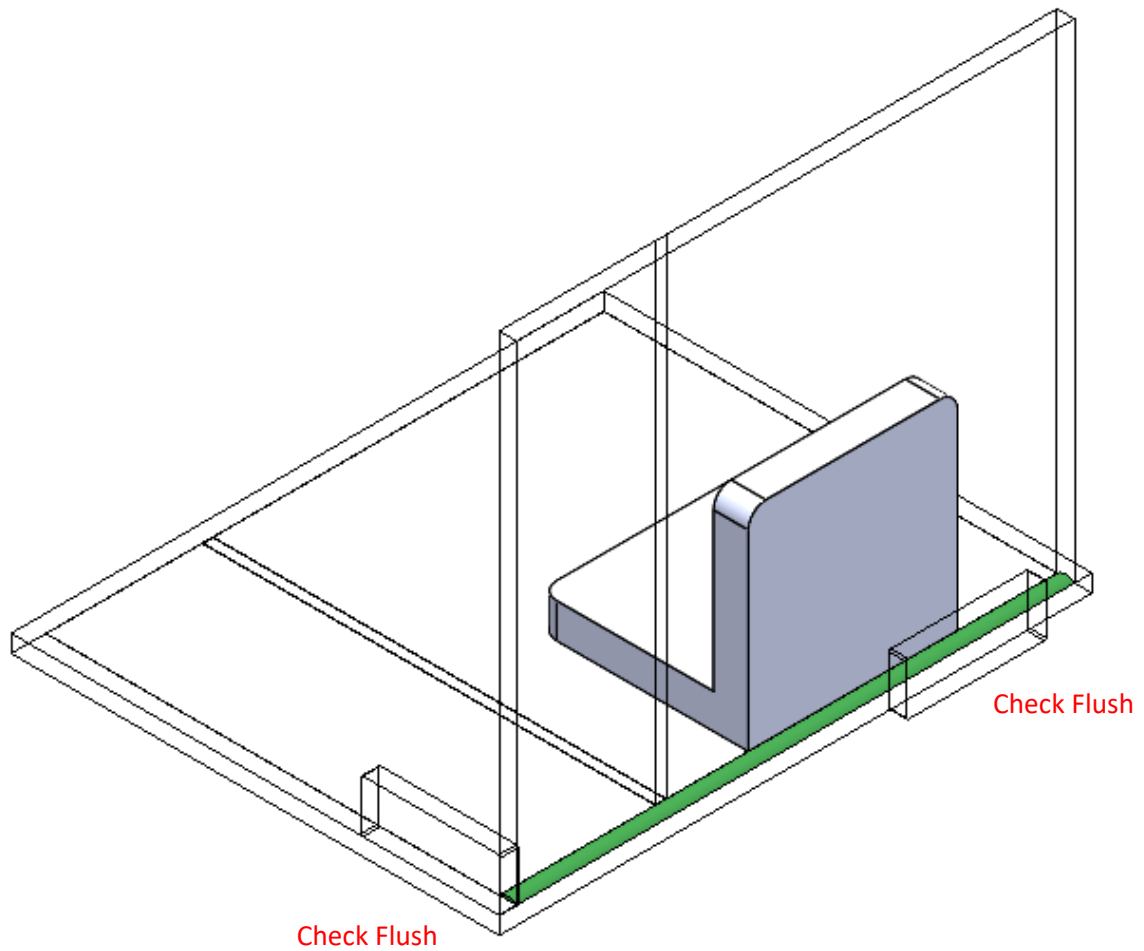
1. Remove the small strips of the plastic protective film from the edges of the acrylic parts. **DO NOT** remove all the film from all faces.
2. Take the Base Plate and run a small bead of adhesive (shown in green) along one of the long exposed edges, take care to stop it 5mm short each end.



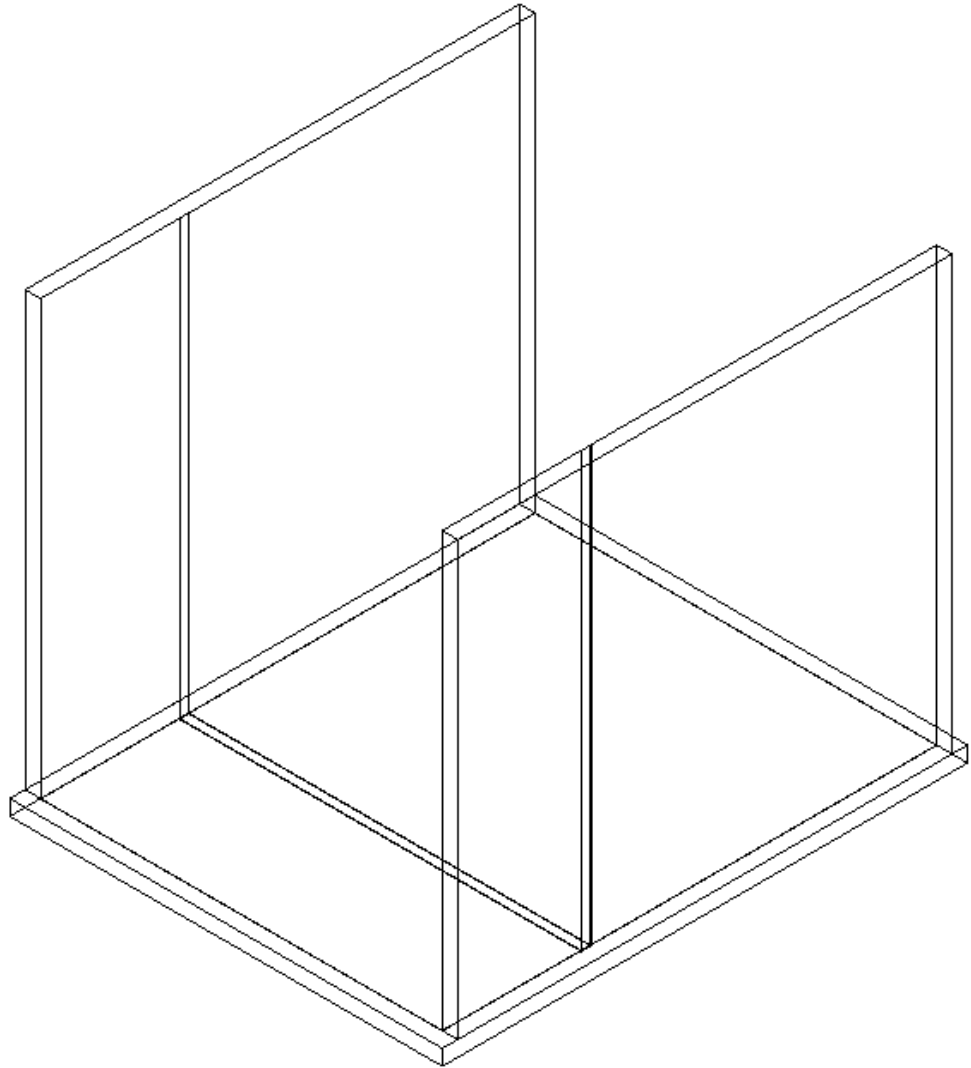
3. Take one of the Side Plates (RHS/LHS) and place the edge on the exposed adhesive and push down. Note – make sure the two scored lines on the Side Plate are facing inside and lined up with the scored lines on the base.



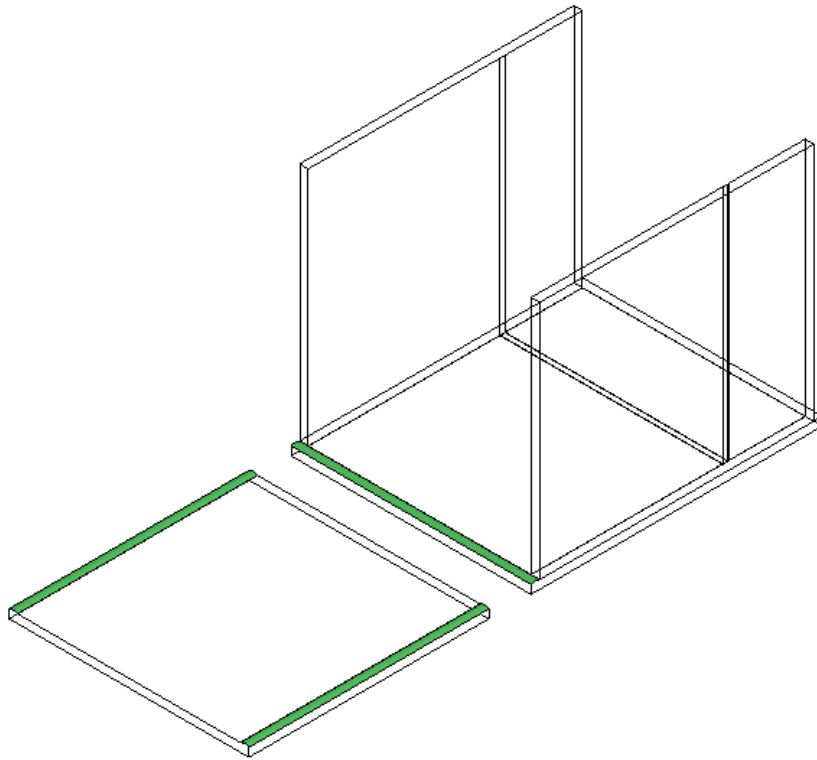
4. Use a Test Piece to check the Side Plate is correctly positioned, it should be 5mm from each edge (the thickness of the Test Piece). The Test Piece can also be used to make sure all faces are flush, and the parts are at 90Degrees. Use an Angle Plate and Magnet (or two heavy objects, such as tins of beans) to secure the side whilst the adhesive partially cures.



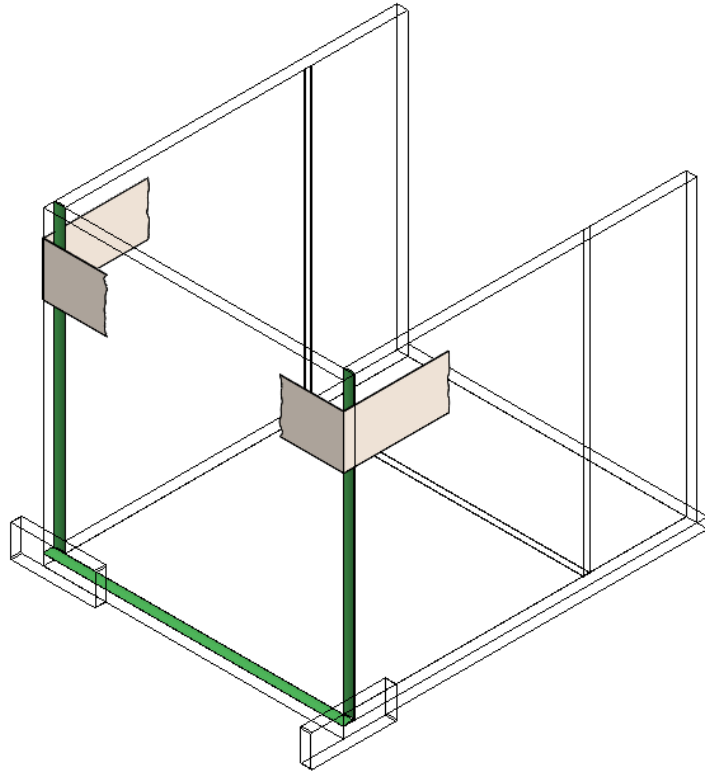
5. Allow the adhesive to partially cure (15-30mins) then repeat the same procedure to attach the opposing side. Allow this to cure enough to support itself.



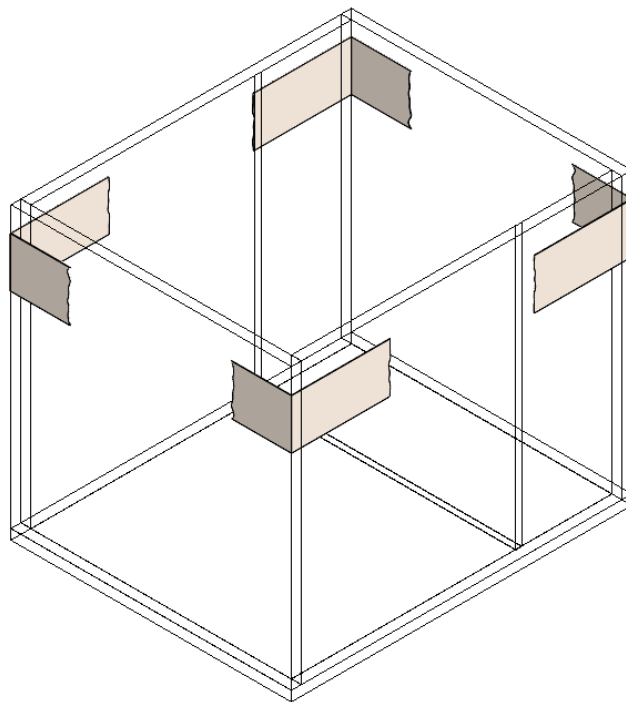
6. Take the Front or Back plate and apply a bead of adhesive along each exposed edge. Apply another bead along the short edge of the Base plate.



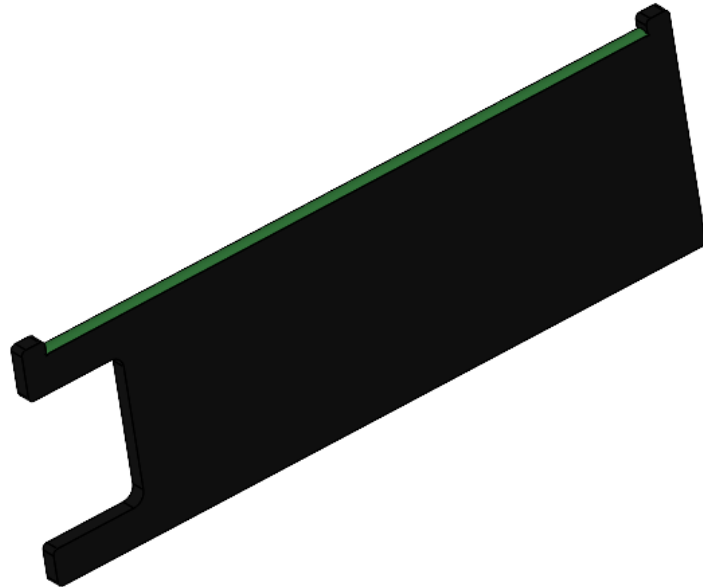
7. Place the parts together securely, use masking tape to secure and use a test piece or scrap of acrylic to check all faces are aligned.



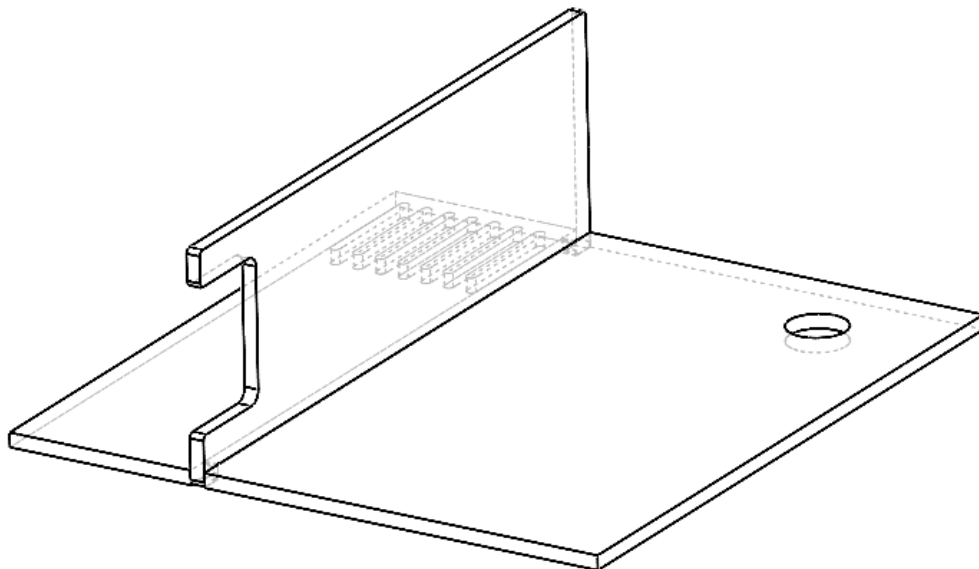
8. Allow to partially cure and repeat the process to attach the other plate. You can use the baffle at this point to make sure the width is correct between the two side pieces. Note – You may find it easier to assemble and fit the baffle, before fixing on the rear plate (see next sections).



9. Take the Divider plate **remove all masking** and run a small bead of adhesive along the inner face, between the two tabs.

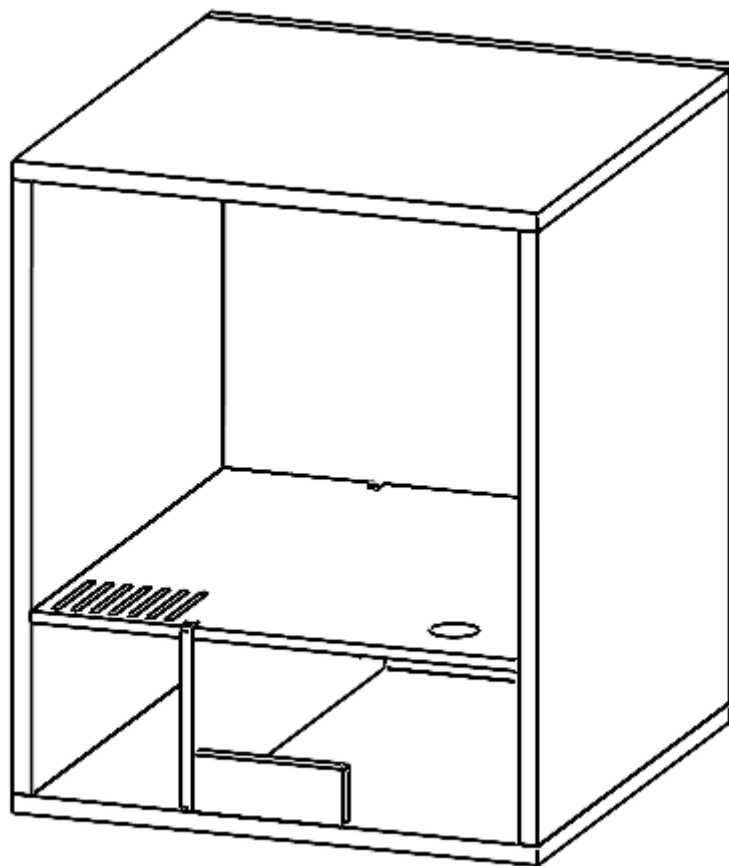


10. **Remove the masking from the rear of the Baffle.** Locate the Divider into the slots on the Baffle plate (colours removed for clarity), with the large cut out on the Divider down, and the hole in the Baffle top right.

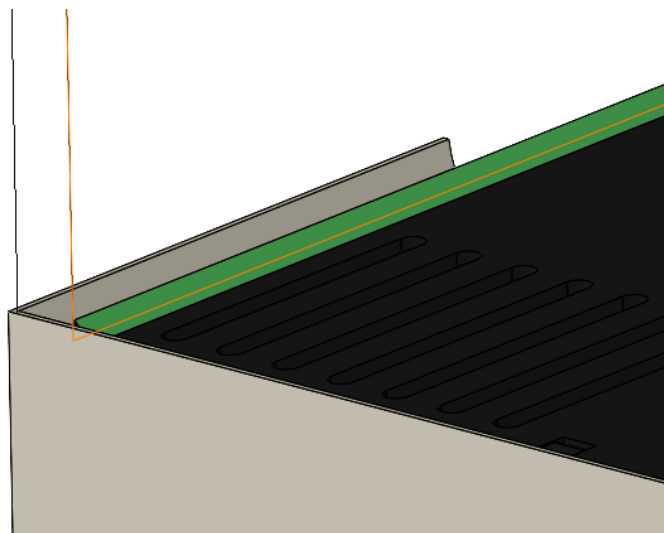
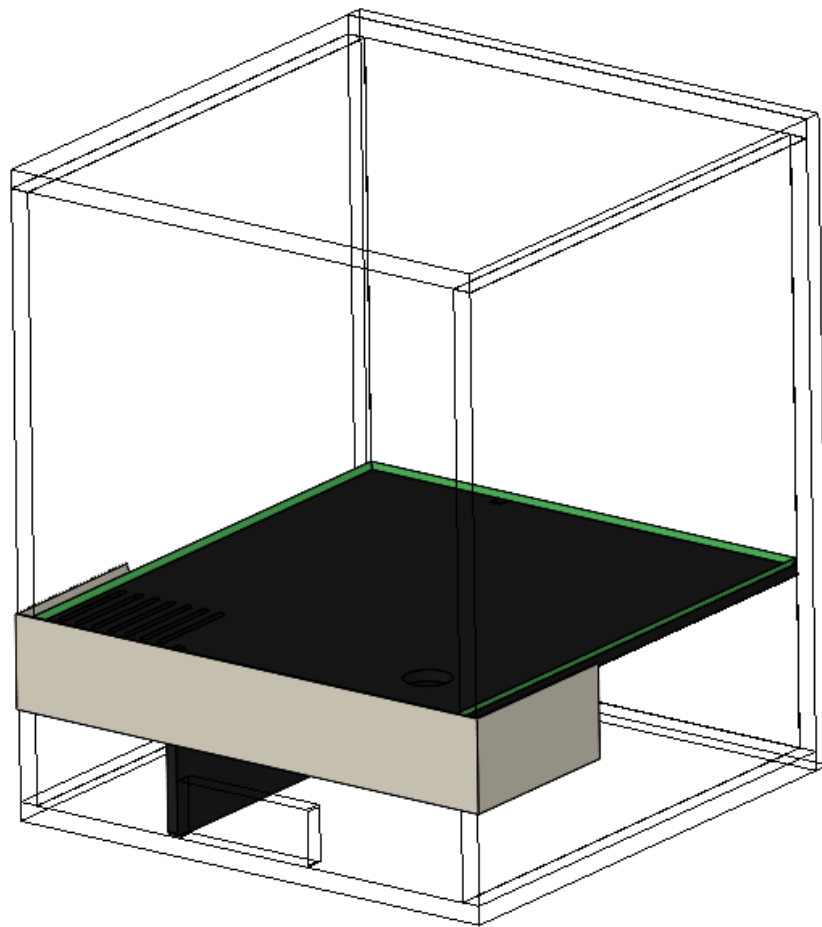


11. Turn the partially assembled tank on its Back face. **Remove all masking from the sections of the tank behind the Baffle (the smaller portions) as these are difficult to remove after the Baffle has been bonded.**

12. and slide in the Baffle and Divider assembly. Check the Divider is square (use a scrap square piece of acrylic or rule) and the Baffle sits in-between the scores on the sides and bottom of the tank. Check all faces are flush. Colours removed for clarity.

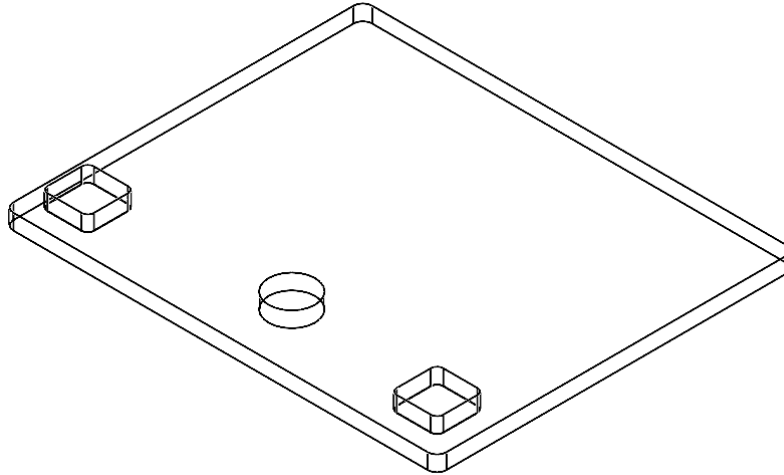


13. The Baffle assembly should be a relatively tight fit, if not, use masking tape to hold in place. Run a small bead around the 3 edges, inside the tank, to form a fillet of adhesive in the corner. This will slowly wick into the joint.

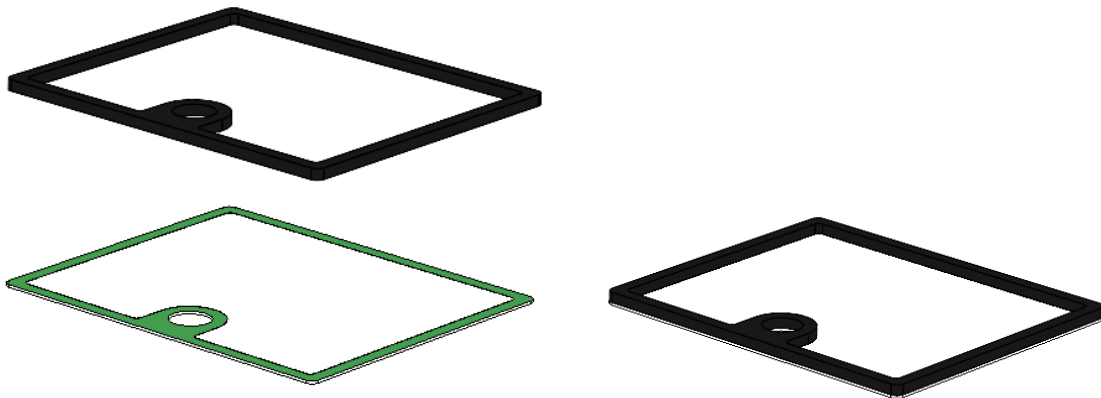


14. Excess adhesive can be removed with a tissue (ensure hands are gloved), the masking will protect acrylic faces from any excess. Allow to bond for 15-30mins, continue to the next step, whilst waiting.

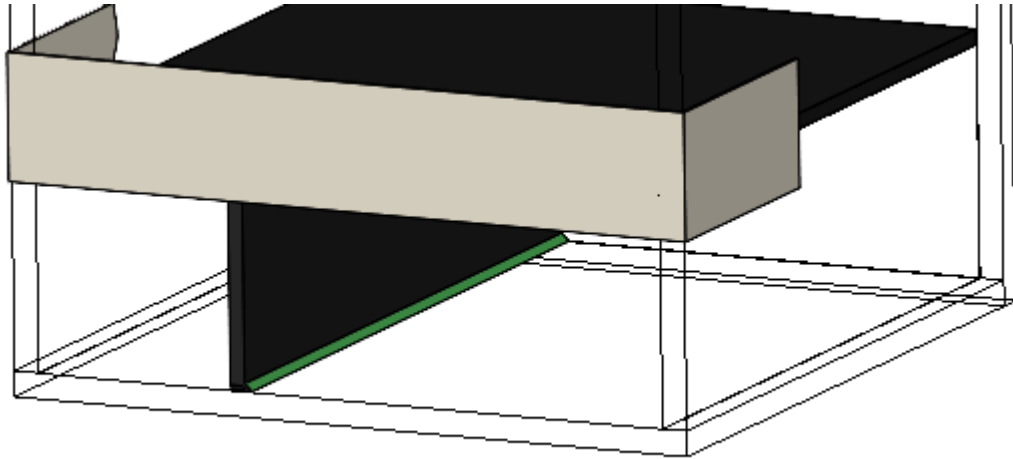
15. Take the Lid and remove the two small squares of masking, apply a few drops of adhesive and then apply the Location Squares (after removing masking from one face). Use the remaining masking to ensure the Squares are aligned parallel to the corners of the lid.



NOTE- If the kit has been supplied with the low profile PETG lid, please bond the brim onto the flat sheet, using an adhesive to create a bead around the outside of the masked part. Ensure you remove the film from around the edge.

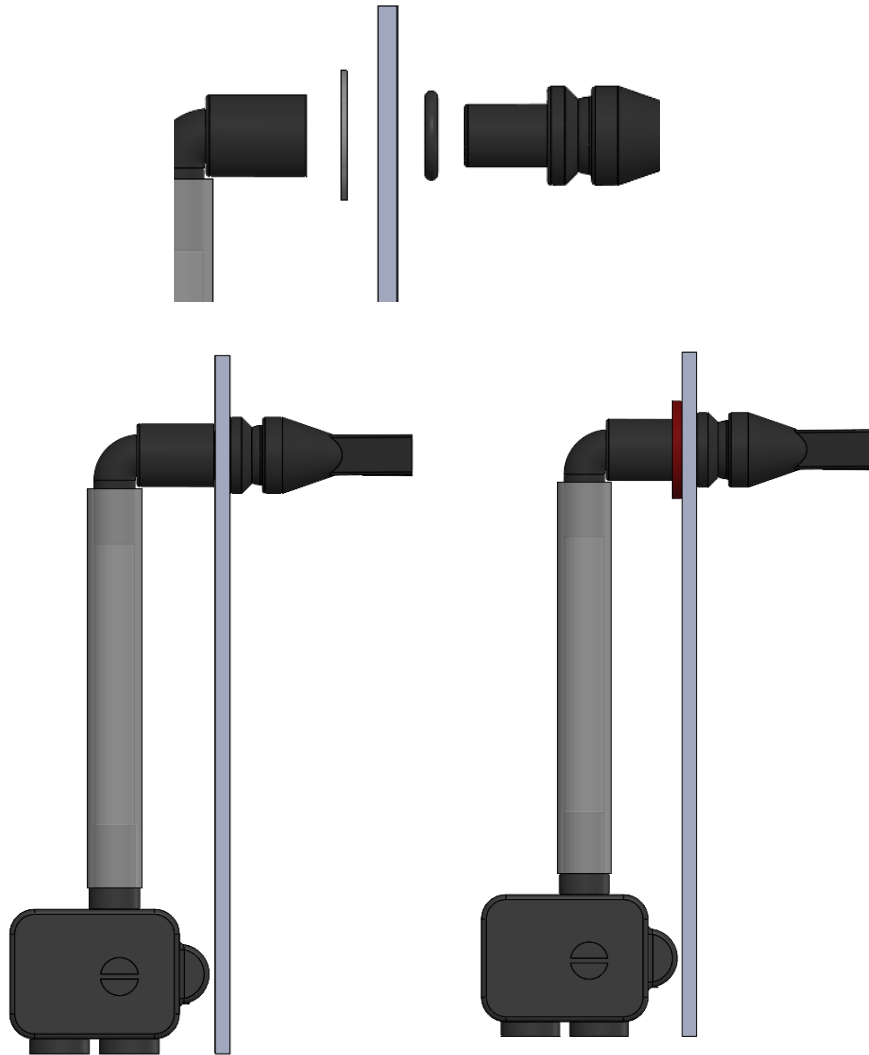


16. Seal the Divider to Back face joint, by running a small bead of adhesive along the corner.



17. Allow the adhesive to partially cure for a few hours, once jelly like, any excess can be peeled away, or scraped carefully with a blade. Allow 24 hours before testing with water.

18. To install the pump using the black nozzle, push the silicone tubing over the pump outlet and narrow end of the elbow. You will need to trim the tube to the correct length. Push the nozzle shaft through the baffle hole and if the baffle hole is oversized, use the supplied washer on the back (shown in red), with the o-ring on the front, before sliding on the elbow. All parts are push fit.



Congratulations, you've now finished your tank. Just add your filter media, scape and livestock (no Discus). Feel free to post any of your progress or completed tank on Instagram, remember to use the tag #picotankclub for induction into the most illustrious aquarium club ever :o).

If you have any queries, require help or have some ideas to improve the kit or guide, please contact me on Instagram @pico.tank or via sales@ptank.co.uk

