

Brookland speedway assembly manual

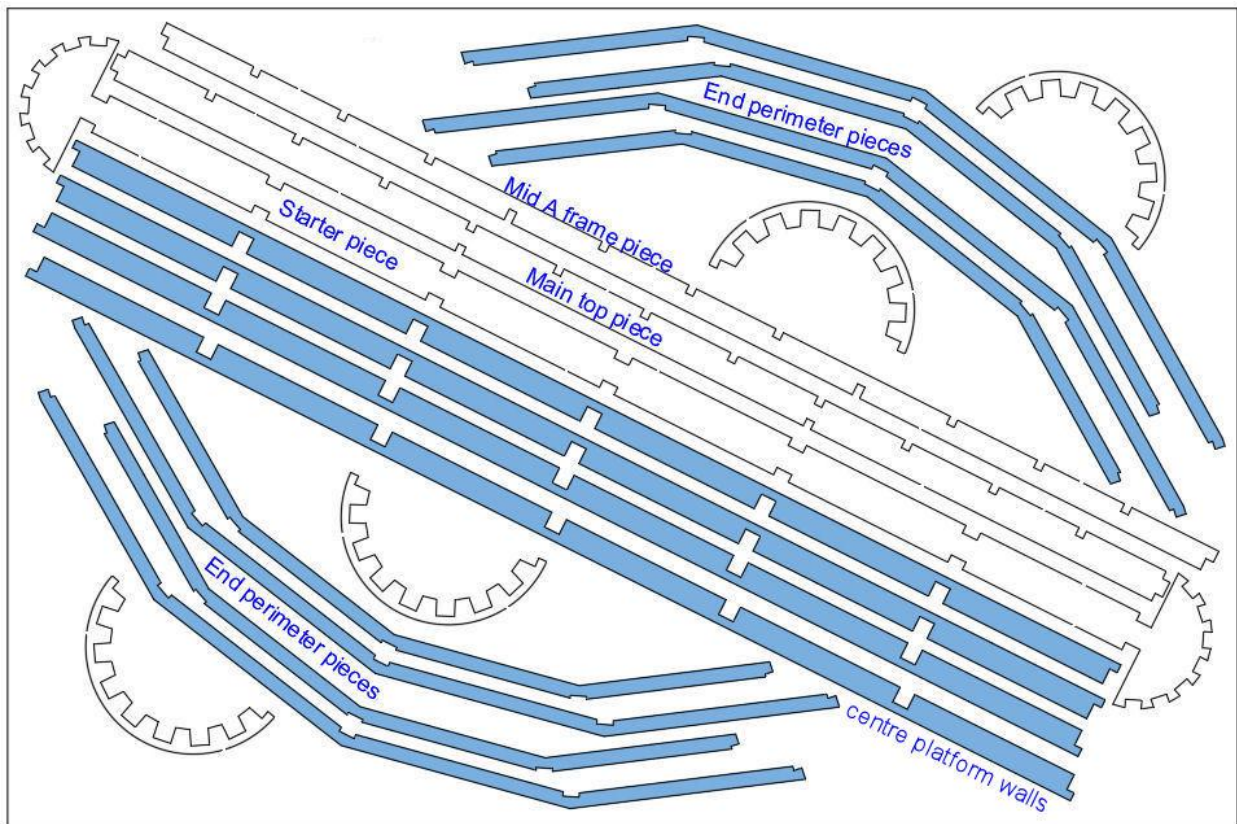
Before starting construction use the following key diagrams and colours. Identify and become familiar with all parts before removing them from the boards.

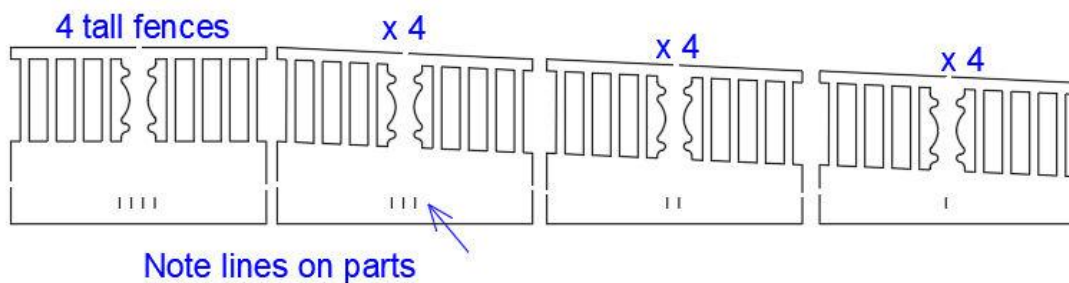
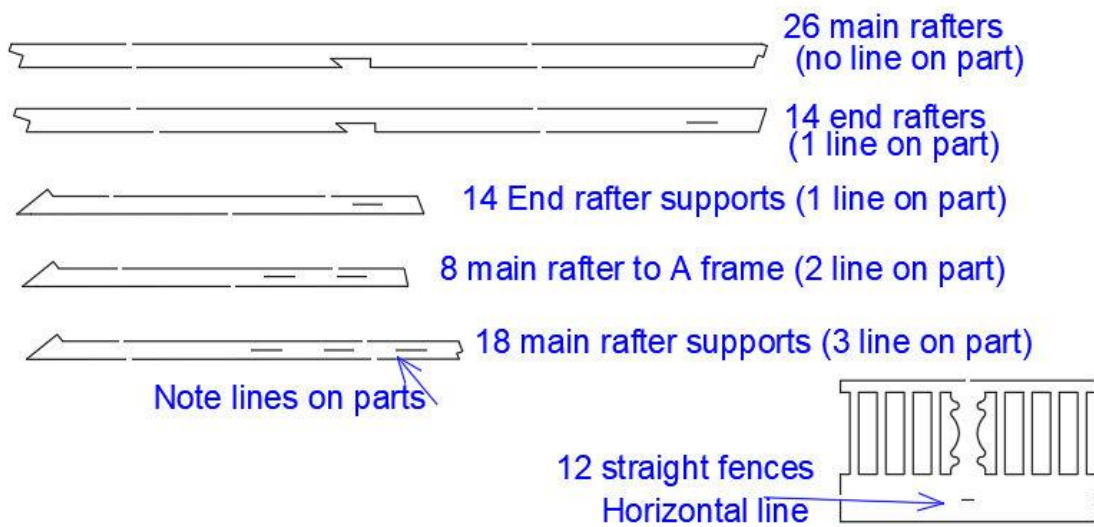
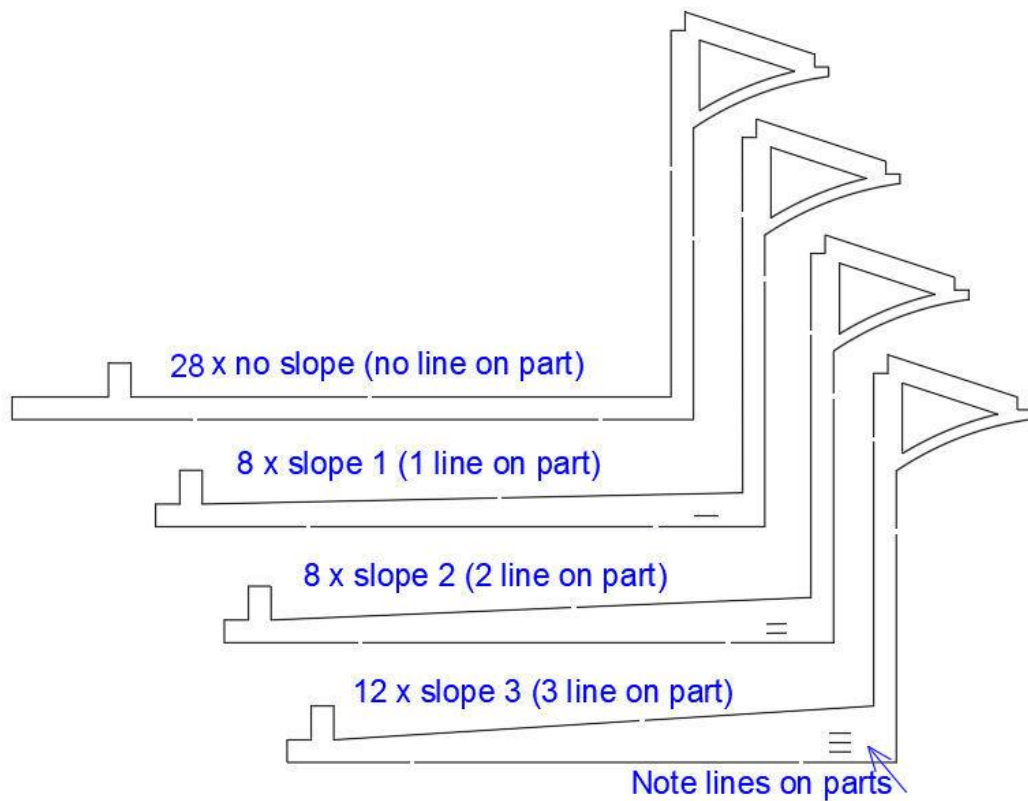
Many parts are self explanatory and can be visually identified.

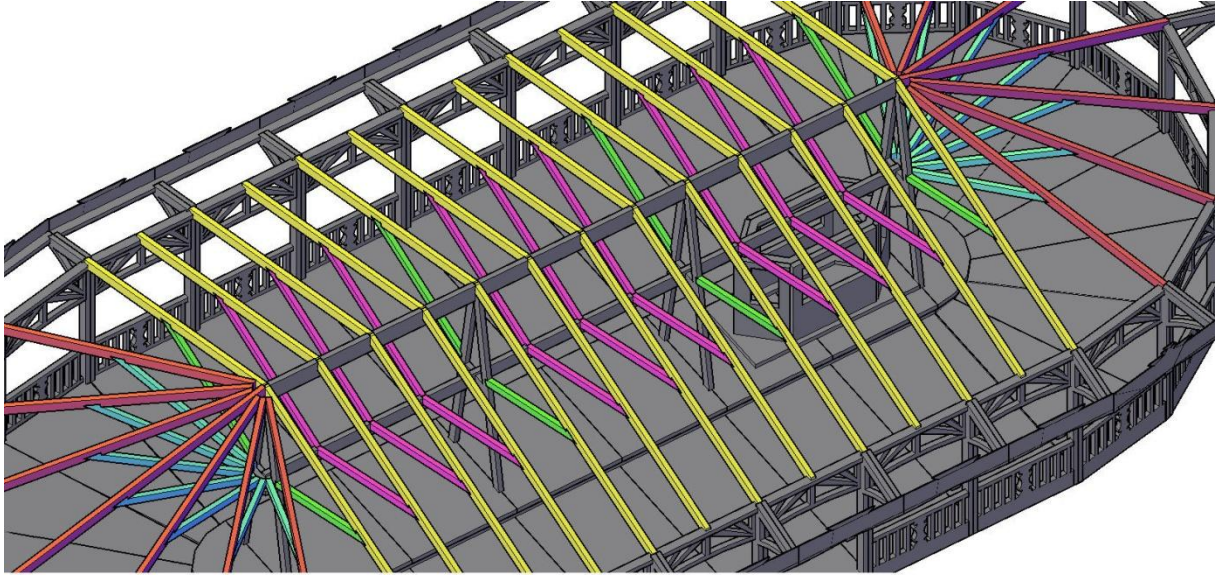
The rafter roof construction is a bit more complex and the floor support beams/upright posts need to be installed in a certain order.

Crucial parts have identification marks on them to make it easier.

Use the next pages and colour diagrams as a guide







Key for rafters and rafter support pieces

White - 4 perimeter straight pieces

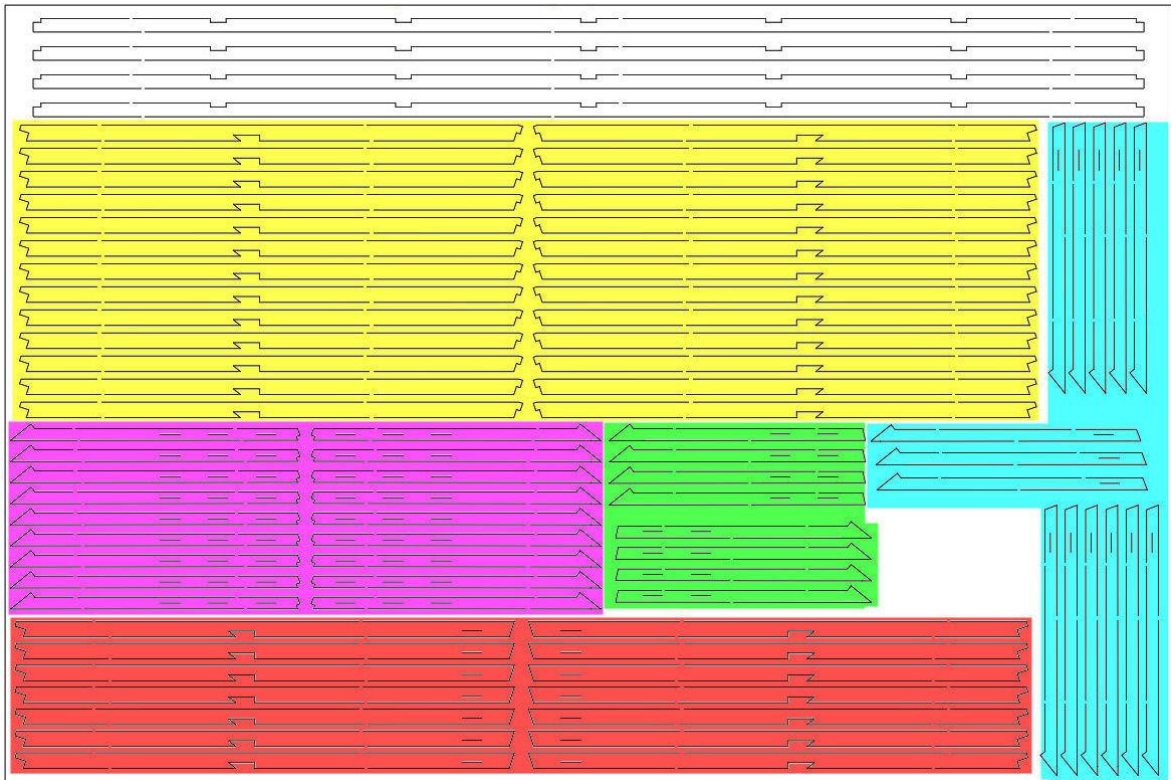
Yellow - 26 long rafters with no marking lines

Red - 14 long rafters with 1 identification line

Cyan - 14 end short rafter support beams with 1 identification line

Green - 8 short rafter support beams with 2 identification lines

Magenta - 18 short rafter support beams from A frames with 3 identification lines



Remove all parts needed at each stage with a sharp - snap off blade type knife

Each part is almost cut out from the board and only held in with a few 1mm tabs, locate these and cut through each tab with the board flat on a hard surface using the tip of the knife blade.

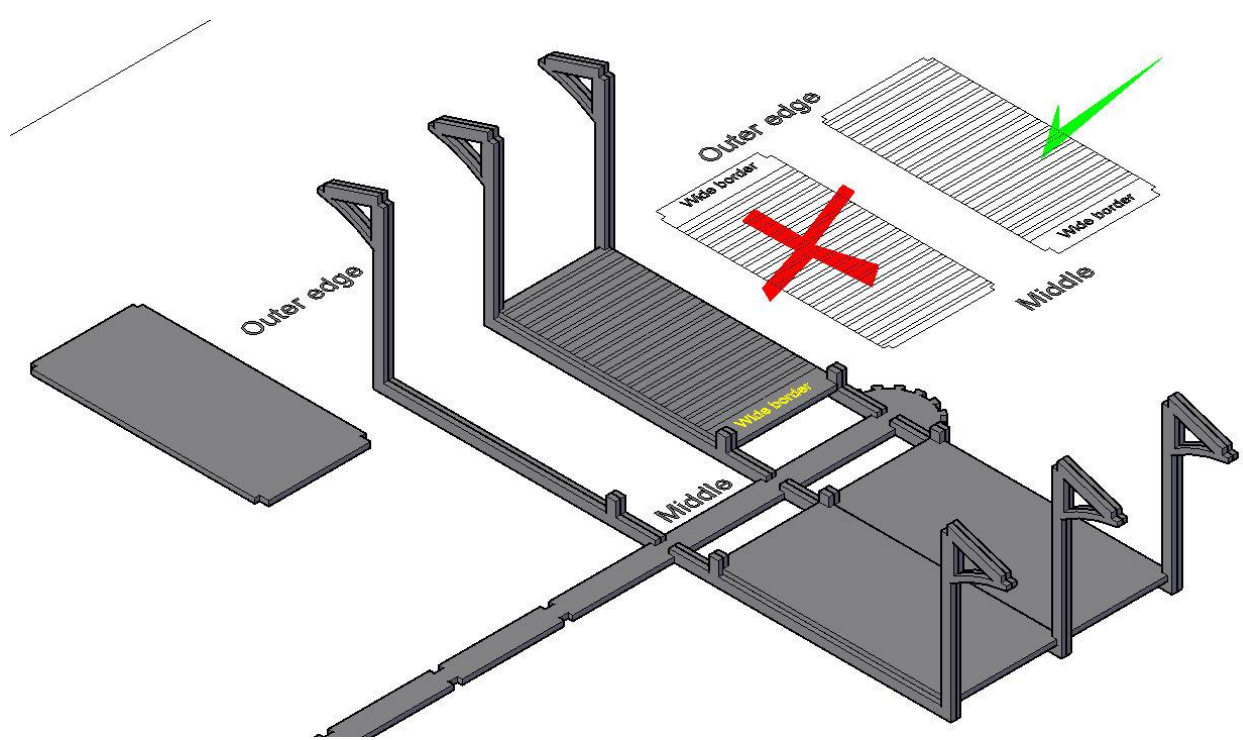
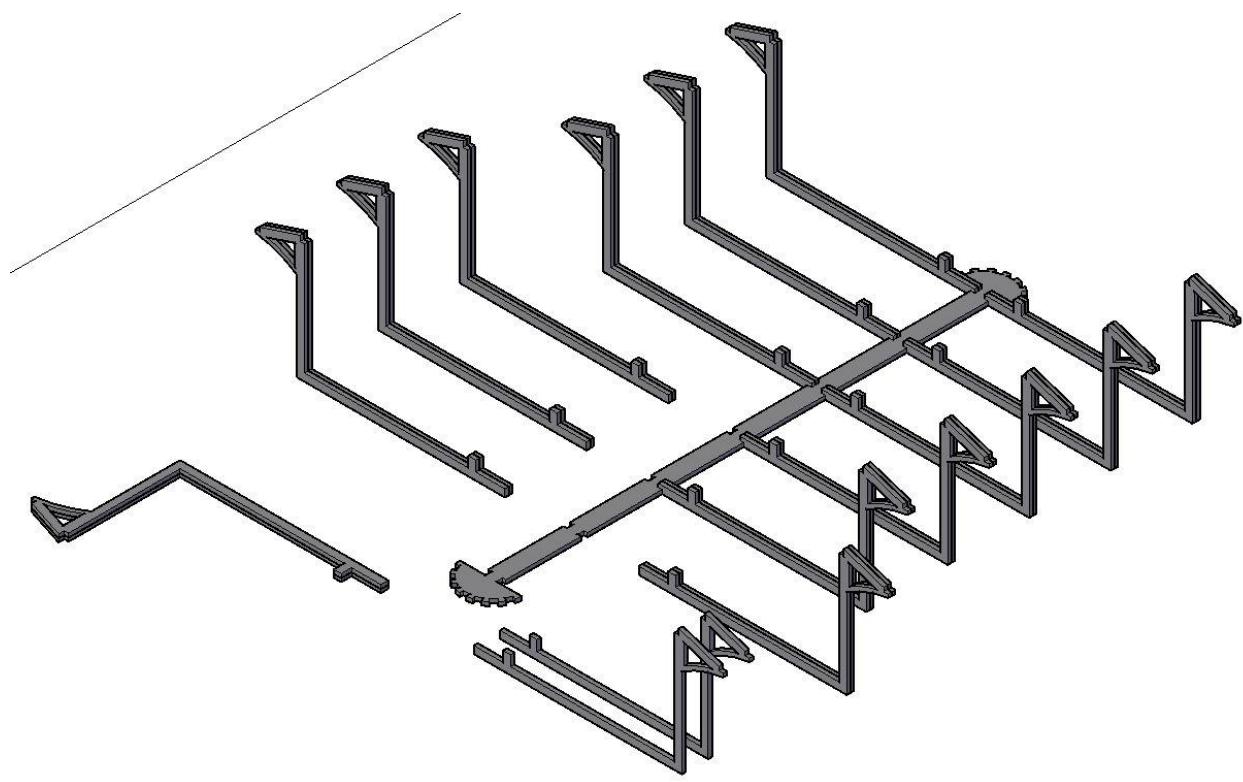
Once the part is removed the leftover tab stumps should be sanded smooth. All parts should be dry fitted before gluing and any adjustments done with a file etc – don't force parts together as some can easily break; Sand or file to make them fit better if needed.

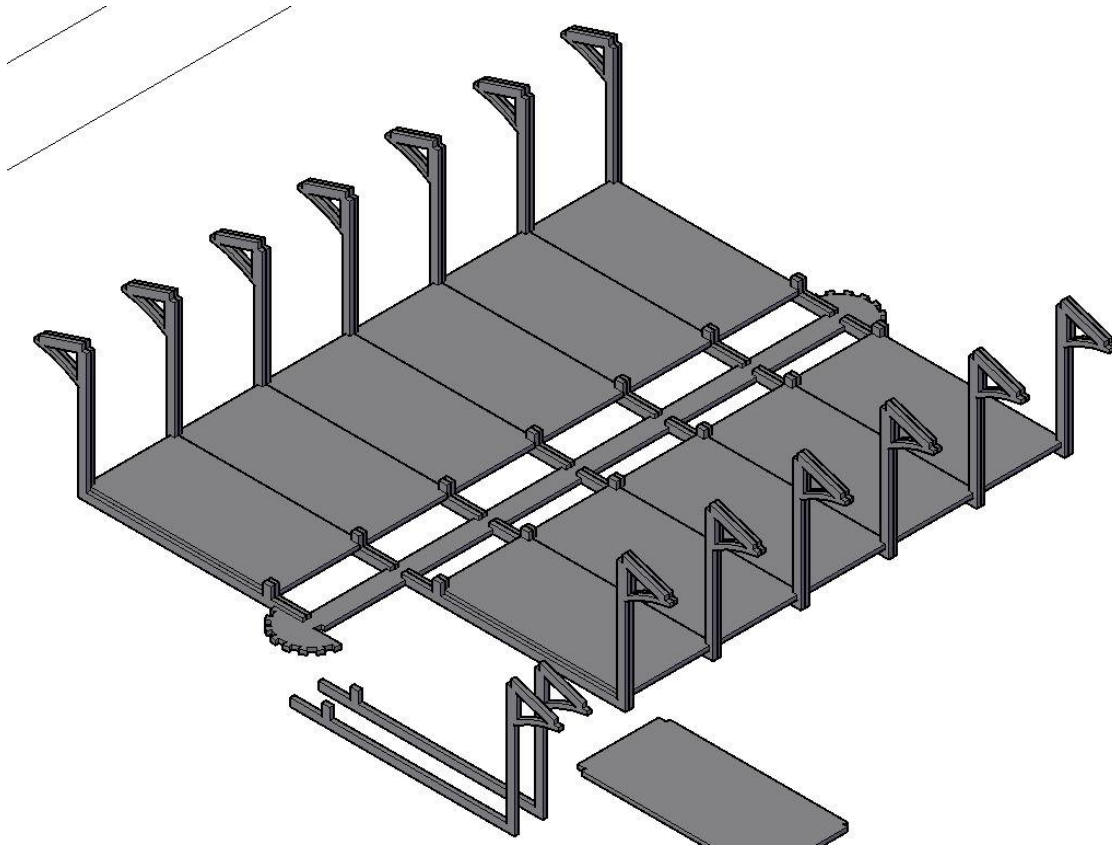
Assembly Instructions

Locate 24 x floor beams/upright posts the ones with no slope and no identification lines; glue them together in pairs to end up with 14 pieces – sand these smooth

Lay the starter piece flat on your build surface and glue in the 14 pieces as below – temporary insert floor panels as you go to keep things squared up, you can glue them in if you wish as you go

(Important! Look at the diagram and make sure your panels are fitted the right way around or things won't line up later, when you have placed the first rectangle panel you can double check by putting a triangle panel against it to see if it lines up, the etched lines will be way out if it is the wrong way around) a triple check – if the end of the panel is flush with the outside of the posts then it's wrong, it has to be set back from the front of the posts by 2mm to take the thickness of the fences.





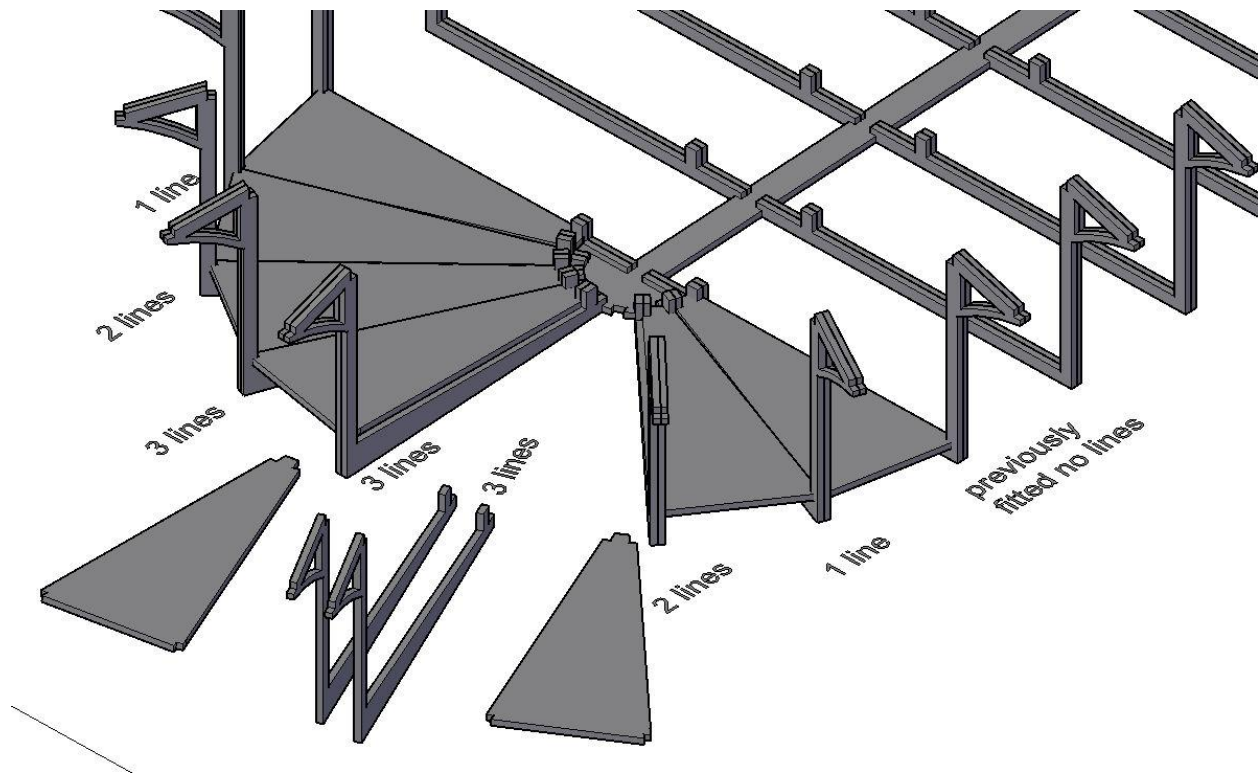
Next locate the floor beams/posts with the identification marks

There should be 8 with 1 line, 8 with 2 lines and 12 with 3 lines

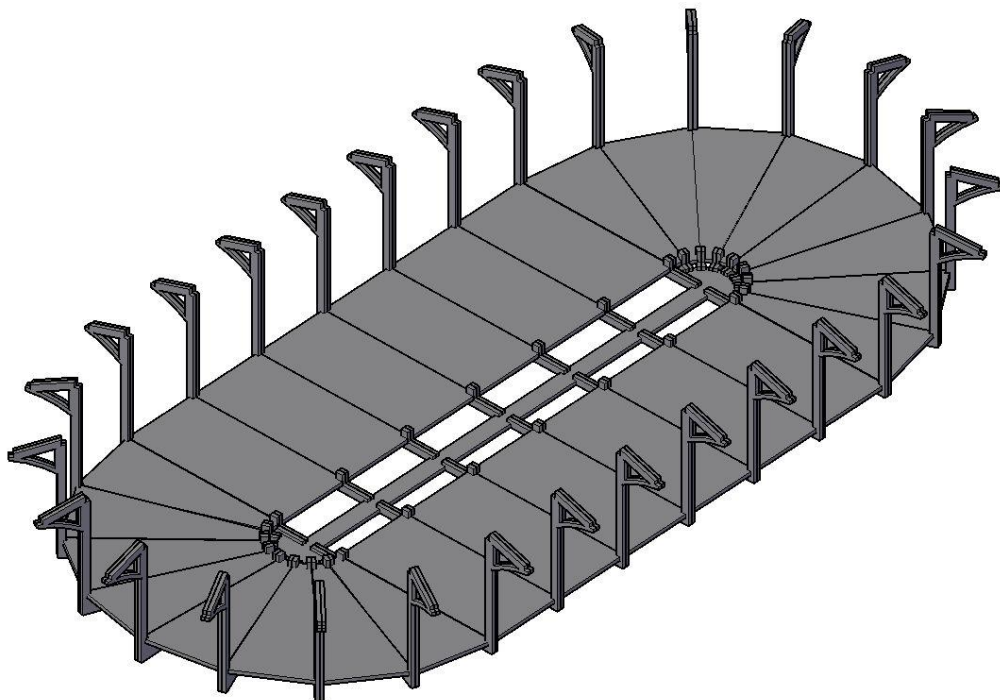
Again glue these together in pairs so you have 4 number 1s, 4 number 2s and 6 number 3s

Assemble these as to the diagram. Fit the triangle floor panels as you go either temporary or glued if already painted.

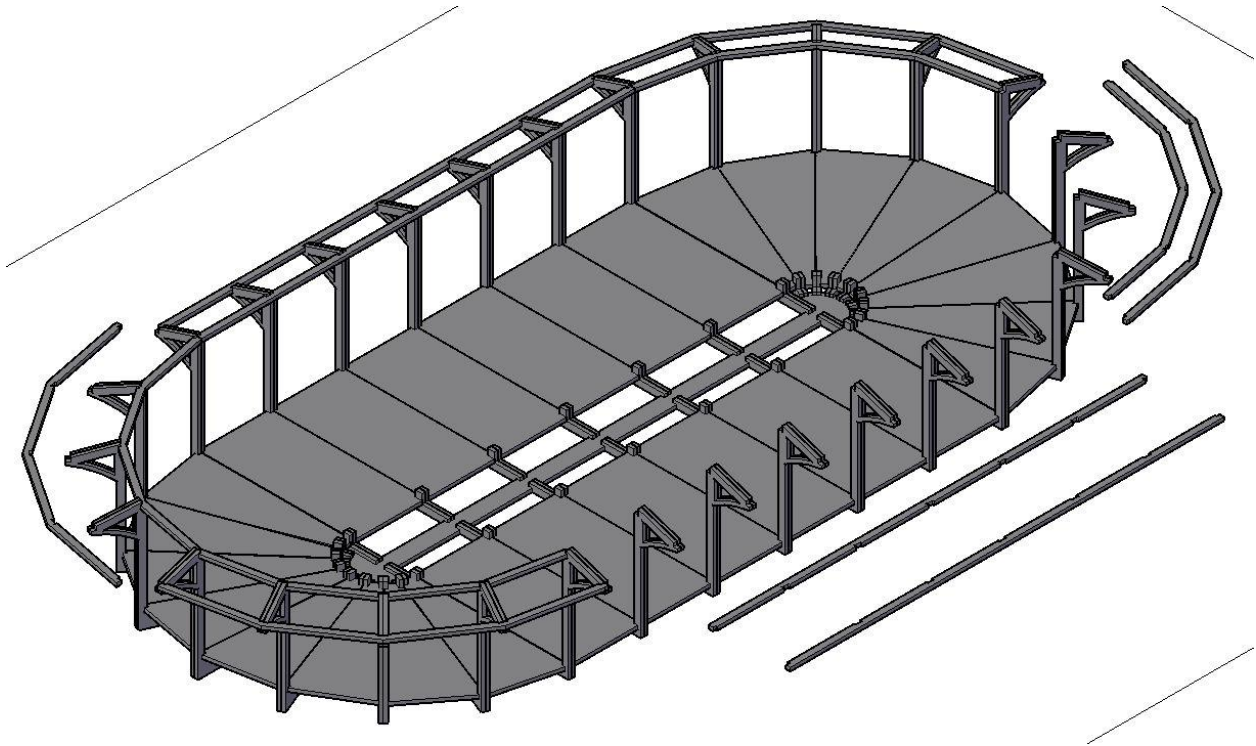
The triangle pieces may not sit absolutely flat due to the banking of the track but it is only slight so glue to the best fit.



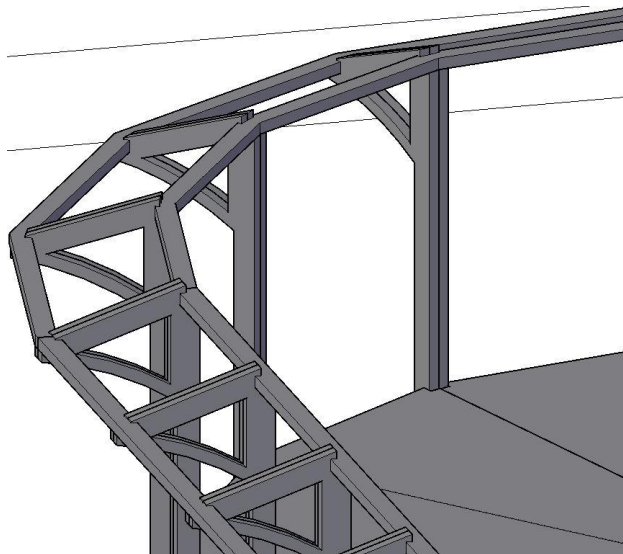
When all panels are fitted try not to lift the model as it will be weak in places and may bend, when the upper rafters are fitted it becomes very strong.

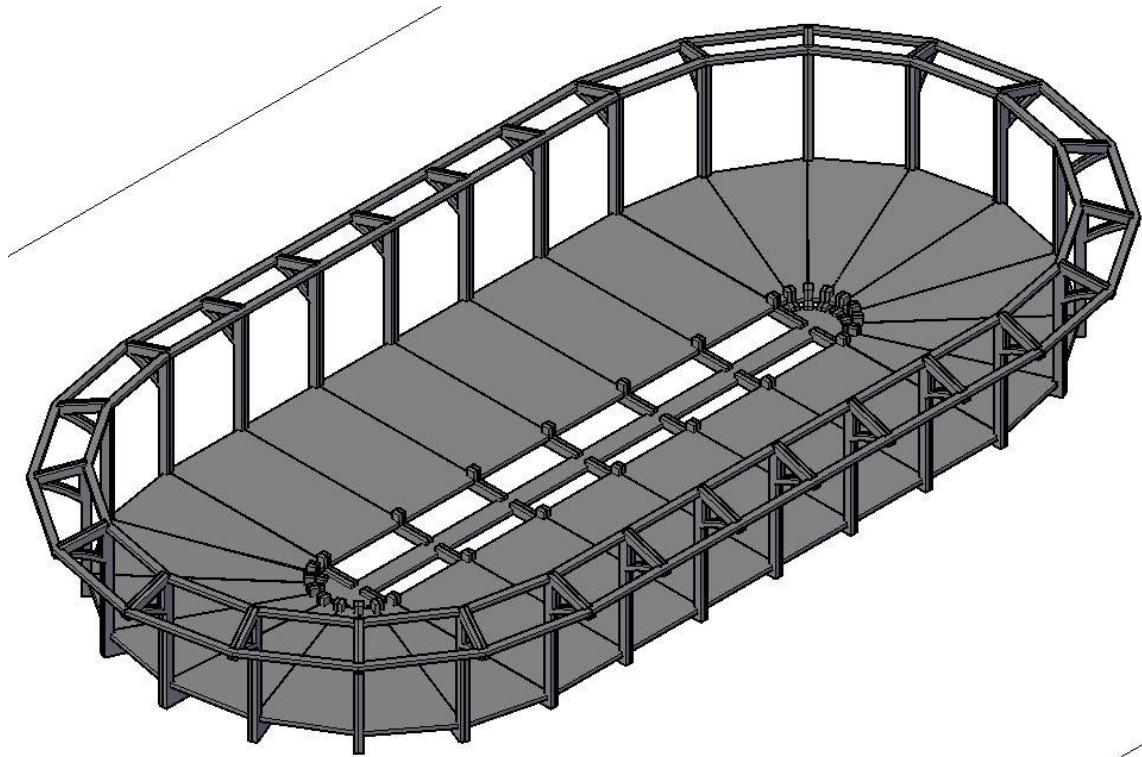


Next locate the 4 long main perimeter pieces and 8 end perimeter pieces fit them to either side of the post tops.



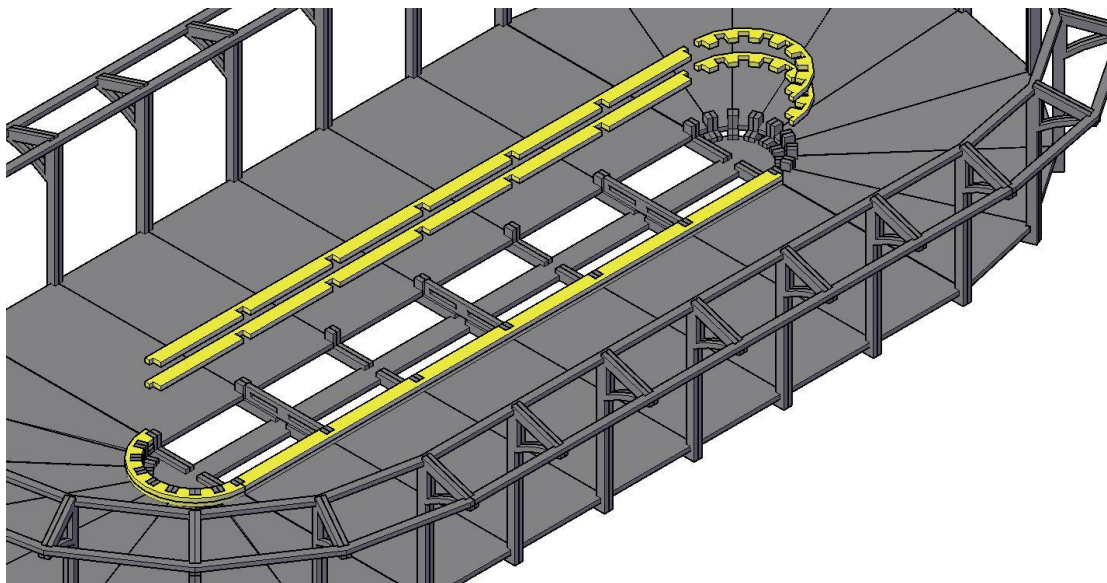
Note the 4 long main inner and outer pieces are the same but the 4 curved inner pieces are smaller than the 4 outer ones.



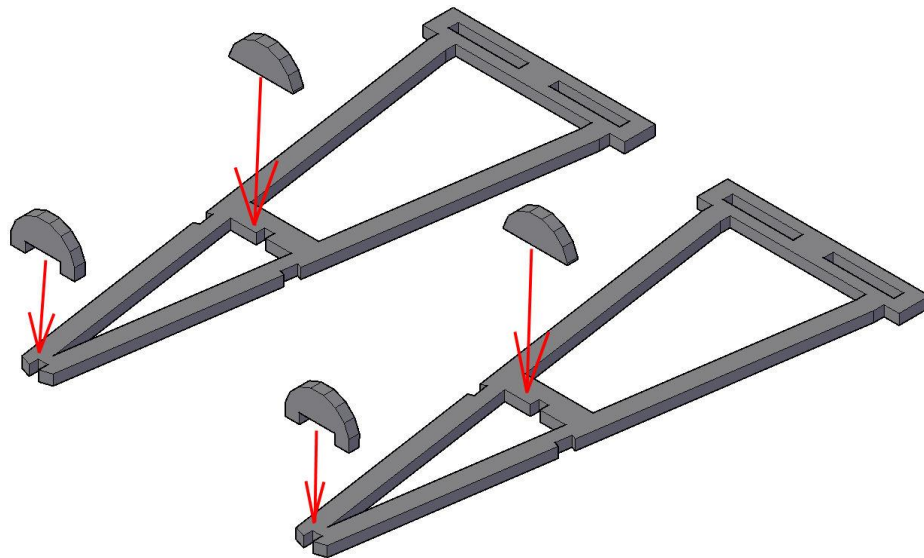


Now locate the centre platform wall pieces, there are 4 on the top part of the rafter sheet and the 4 castled end walls are located in the board where the starter piece was.

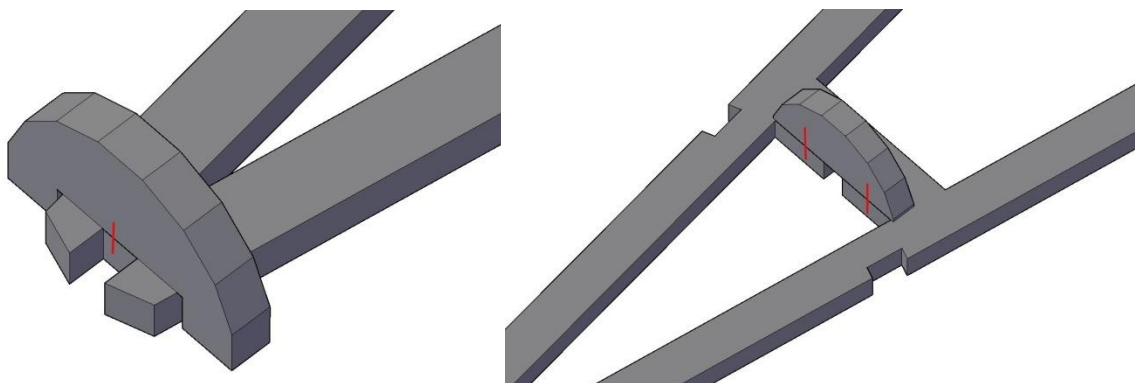
Fit these as shown, they are just doubled up to give height



Locate the 4 A frames, 3 middle platform supports and the 4 small rafter end supports. Glue the small rafter supports to 2 of the A frames as below.

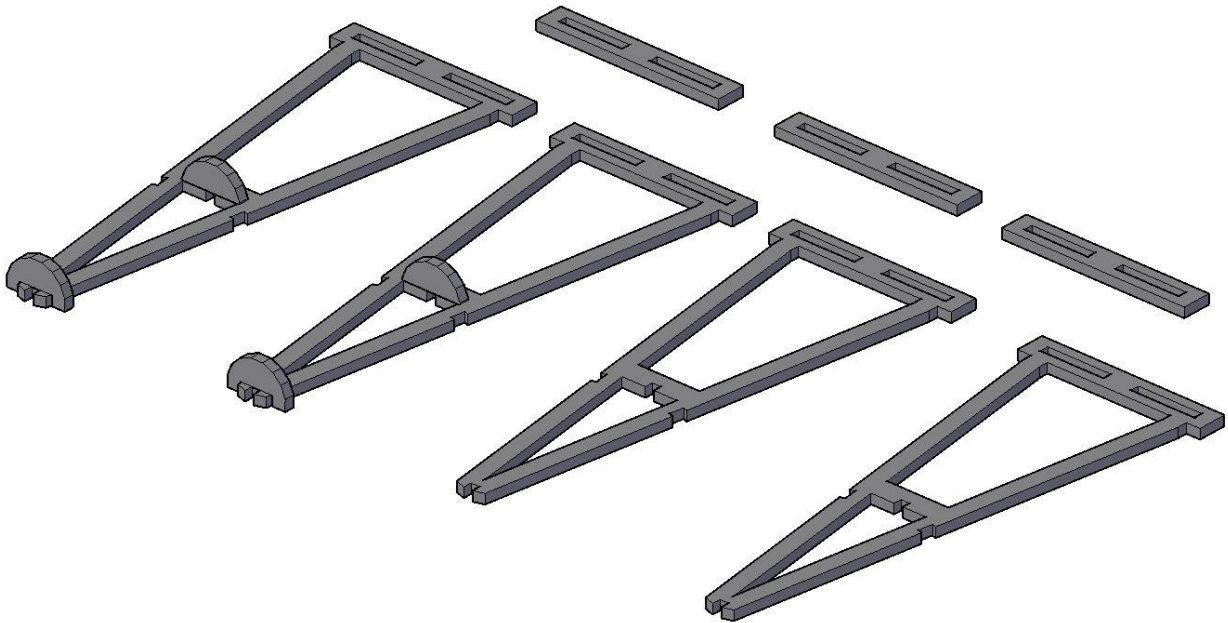


Make sure the slotted top support is as flush as you can get it to the bottom of the notch in the A frame. Make sure the bigger support is fitted flush to the mid section of the A frame as shown.



You should now have as below

2 x end outer A frames, 2 x middle A frames and 3 platform support pieces



The next part can be a little trick but make sure when assembling to keep everything as accurate as possible; this will save any misalignment problems later down the line.

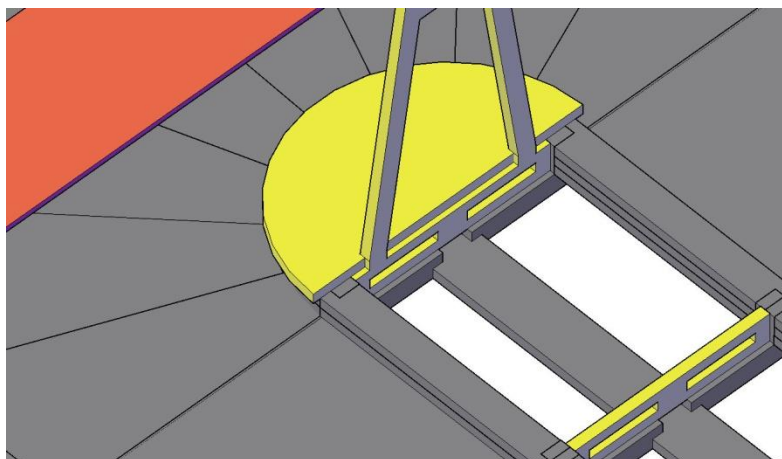
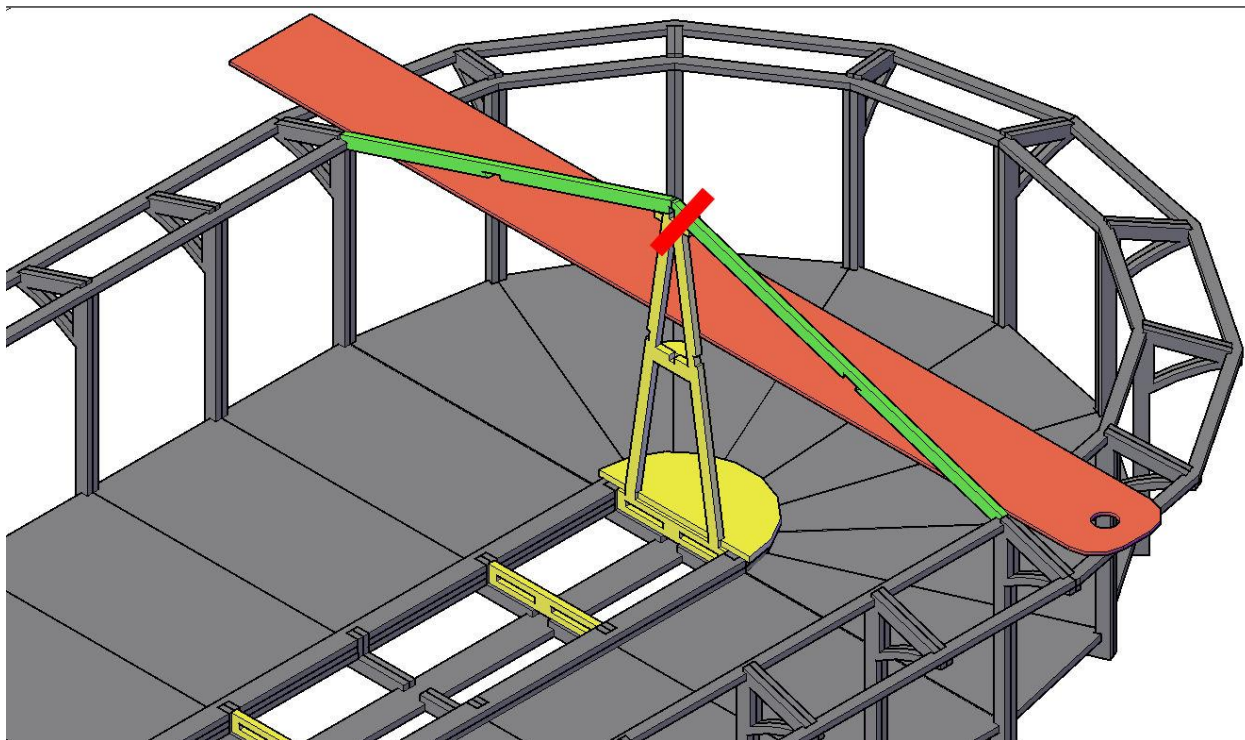
You will need one of the A frames with supports attached and one of the semi circle centre platform pieces and maybe a couple of rafters as a temporary support. It is also a good idea to use a ruler across the top to support the A frame in the correct place until the glue is set.

Use tape, clips or blue tack to hold things in place until set.

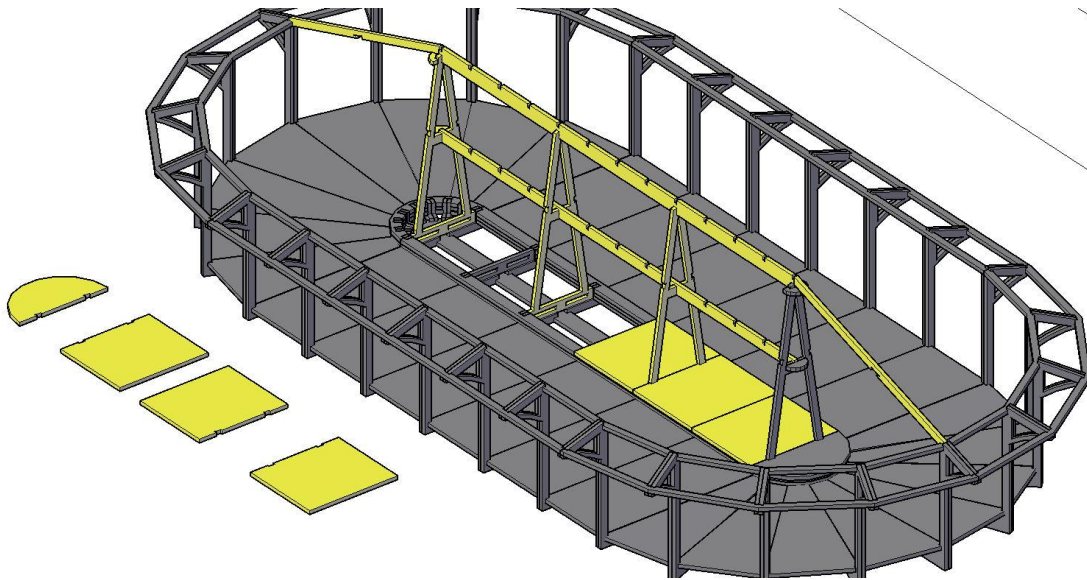
The below diagram indicates tape in red, the A frame is glued in followed by the floor section, make sure the floor section is glued accurately and evenly, check by placing other floor panels temporarily.

Below, the ruler is pushed away by 1mm from the centre of the post tops to allow for the thickness of half the A frame. The green rafters are placed temporary with tape.

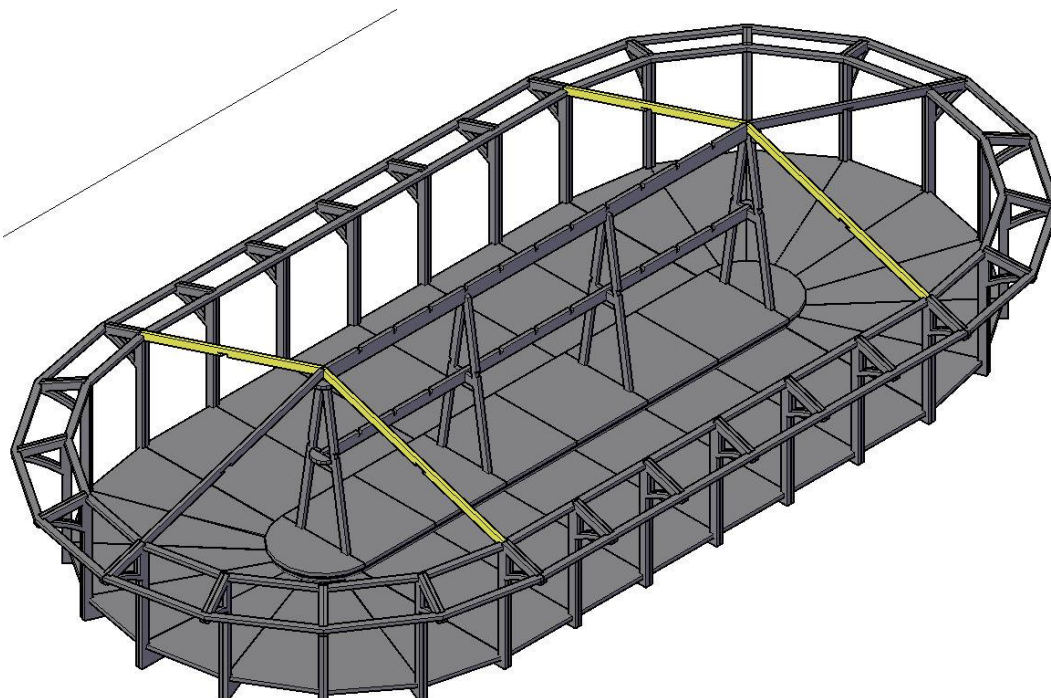
The 3 platform support pieces are glued in every other section where there is no A frame being fitted Note the A frames are glued centrally on the floor joists so there is an even amount of floor joist showing at each side of the A frame, see second picture



When all is dry, fit the other A frames and fit platform sections as you go followed by the long top and mid A frame pieces and 2 of the correct end rafters, this can be tricky (Note on both the long pieces make sure the edge with the most notches faces upwards); the lower part of the end rafters are placed central near the post by eye

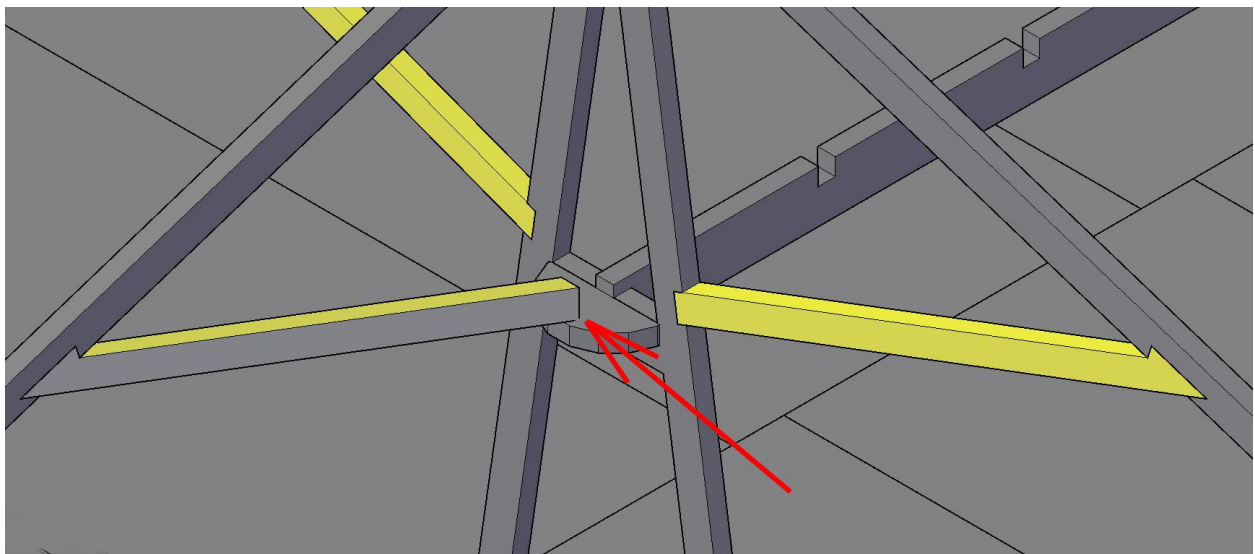


Now fit 4 of the correct rafters in the notches to hold everything



Once everything is set, the rafters and support pieces can be fitted, again this can be fiddly. The support pieces have been designed to key into the rafters to aid holding when being assembled but they still may fall out initially, it gets easier as you progress. Work your way around starting with the ends, the last pieces may need long nose pliers or tweezers etc to help get the pieces in.

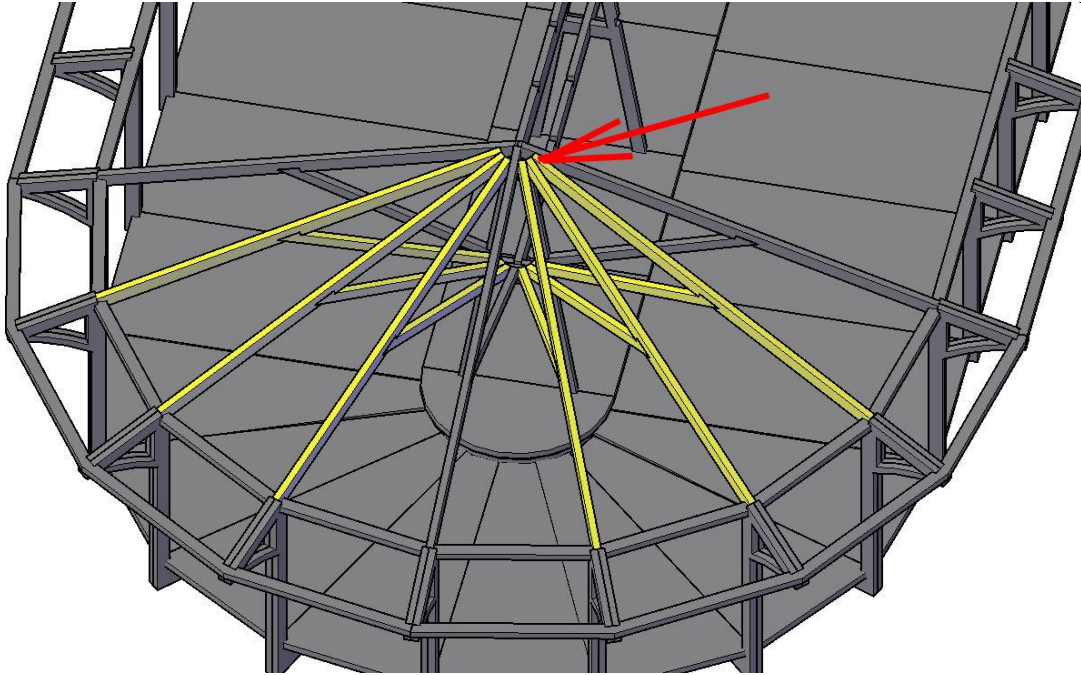
Fit the 6 short rafter support pieces to the underside of the rafters, check diagrams for correct ones, 4 go on the A frames and 2 sit on the A frame rafter supports. Note the centre one is just sat on a blob of glue – more glue can be added as supports are fitted



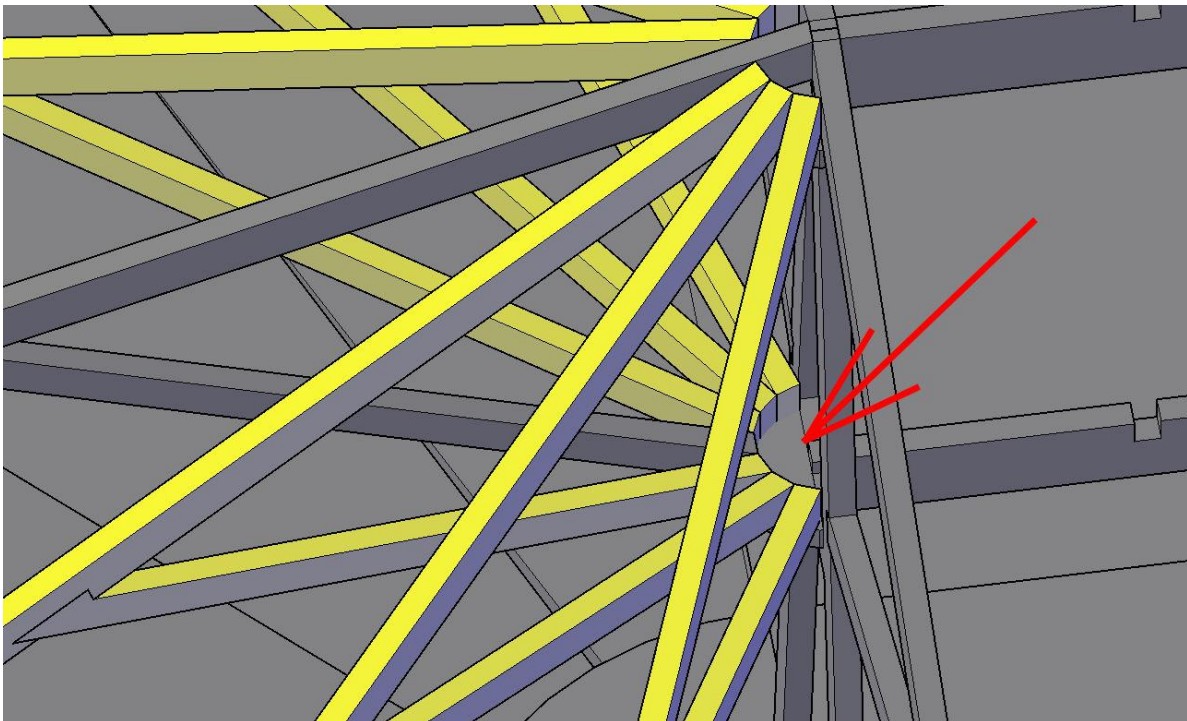
It may be easier to locate them into the A frame first then slide sideways into the rafter, you will find your own method.

The other 6 end rafters can now be fitted. These are the same length as the end that is already fitted,

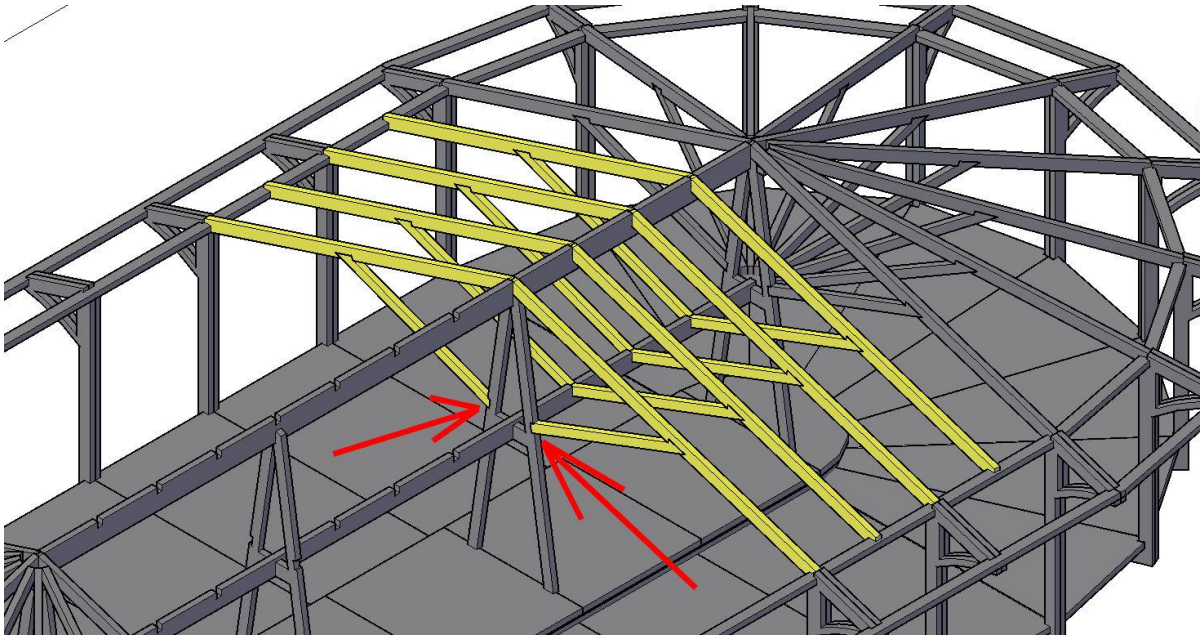
These will need either cutting down 1mm at a time until all 3 fit in the space without force or use a file or sandpaper to make the ends into a long V shape so they fit in together



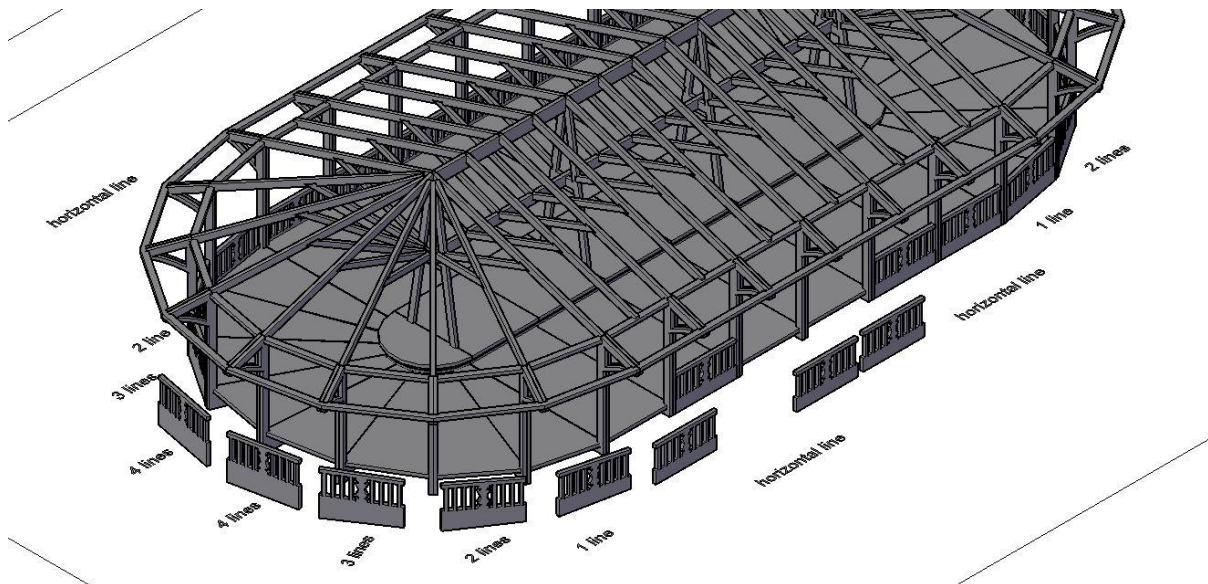
All the bottom of the rafter support pieces are just sat on glue



After both ends are complete, fit the rafters on the straights working your way down remember the support pieces are different on the A frames, all the rafter support pieces fit into slots (Note every other rafter is placed by eye on the lower end to be central between posts)



Once all the rafter work is done fit the fences, these again are fitted in order as in the diagram below, you will need to sand edges here and there or even add small card packers to get them to fit in as they should



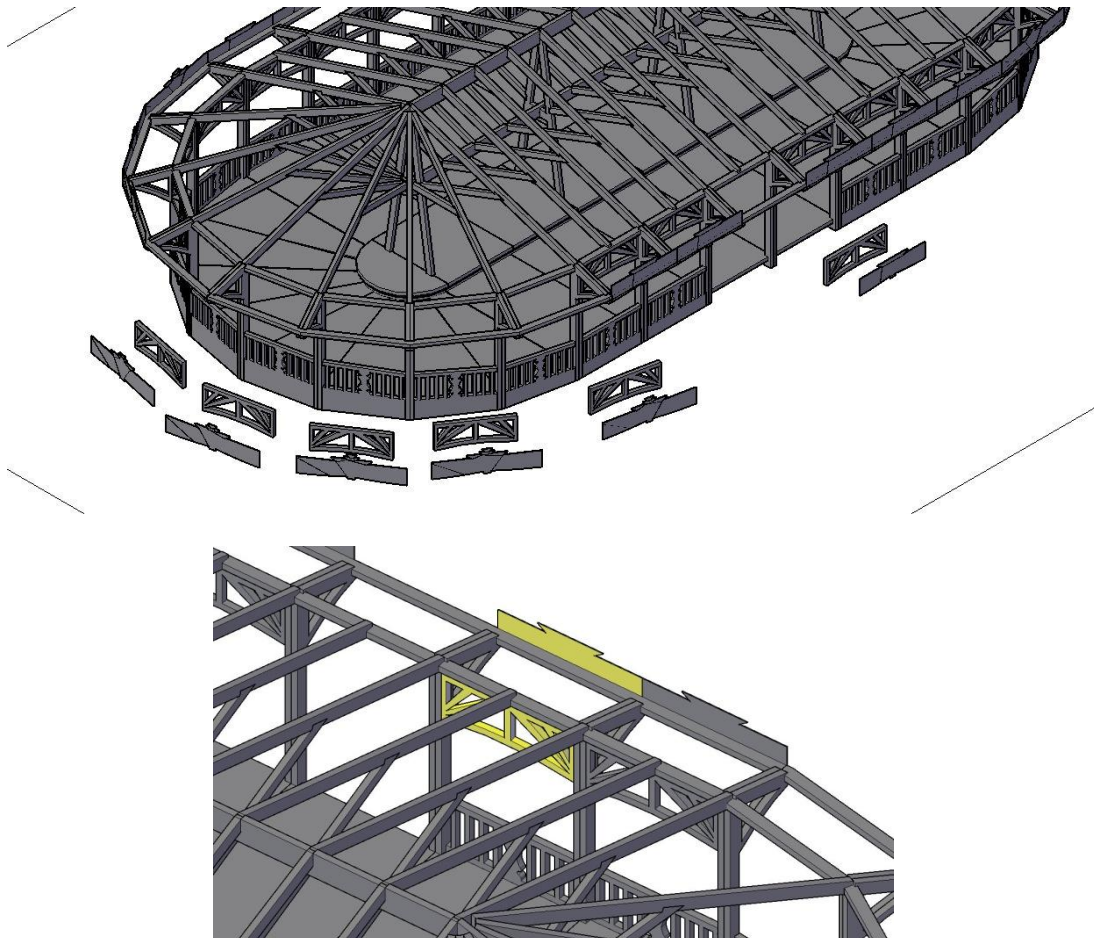
Leave a couple of the fences out for the steps and entry point

Once the fences are fitted you can now fit the upper inner decorative supports followed by the outer rounding boards.

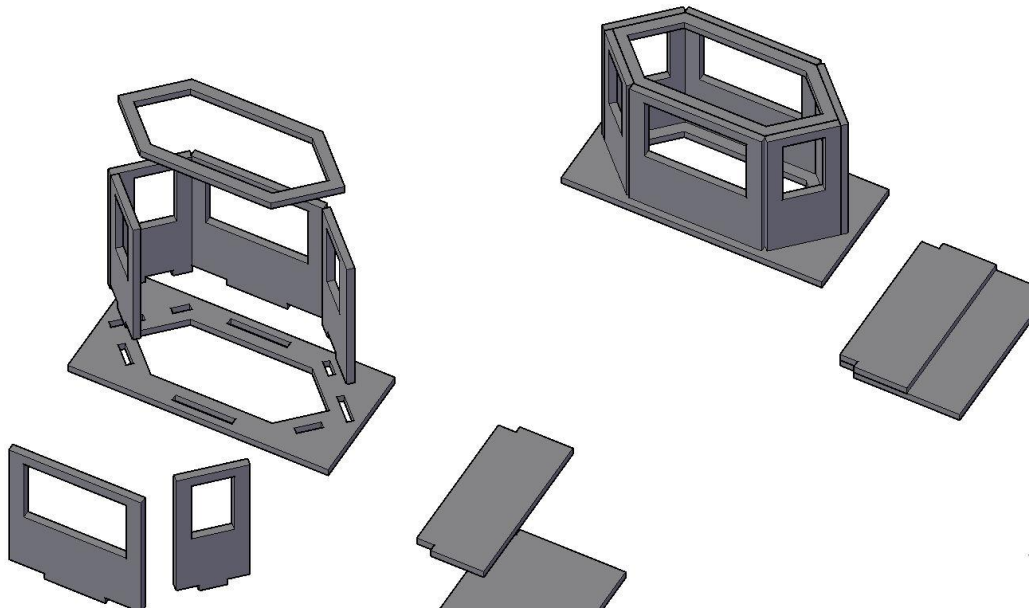
The panels are glued in between the post as flush as you can to the back of the post and to the top. You will need to sand some of these at an angle to get them to fit in the gaps.

The rounding boards are glued on the outer edge just so they are low enough to cover the ends of the post structure, file any protruding bits off around the outer edge of the model prior to fitting the rounding boards to make life easier.

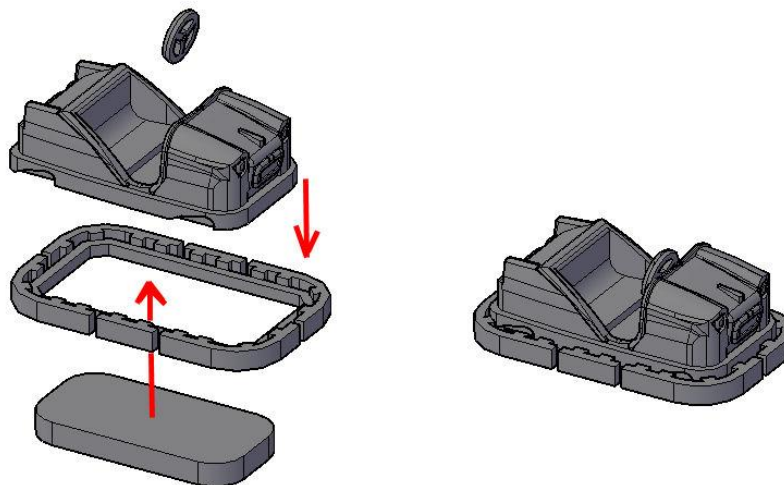
You can fit thin strips of card over the gaps for authenticity if required I



This completes the main model, the pay box and steps can now be assembled

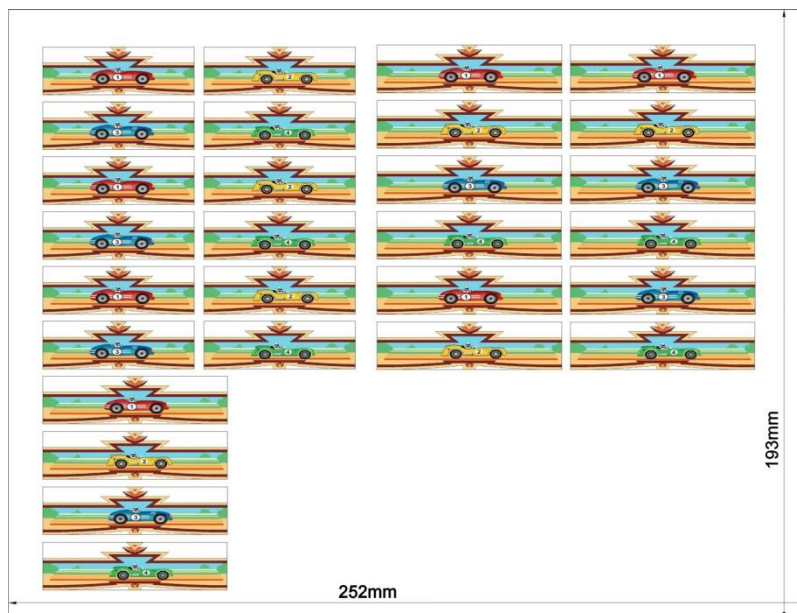
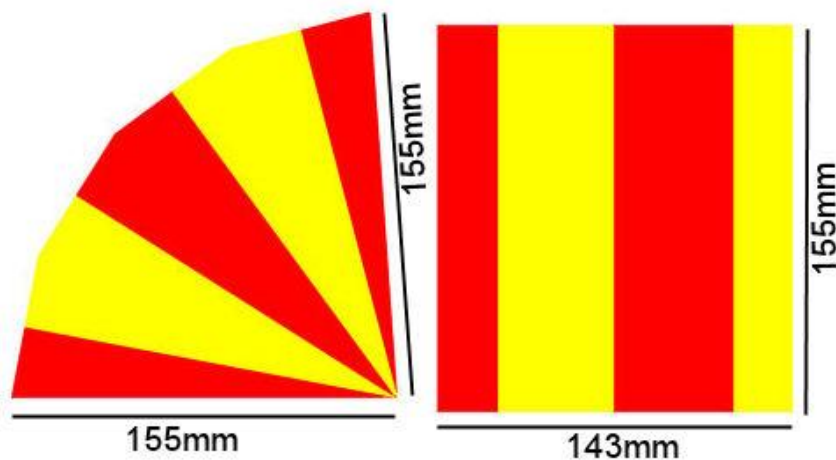


Assemble the cars, glue and clip the frame on the car (this may be tight and require sanding around bottom edge of car so it fits inside). Glue the 3mm ply spacer in the frame on the bottom of the car. Glue the steering wheel on more towards the right of the car rather than the middle, use epoxy glue or superglue gel to help hold it in place until dry



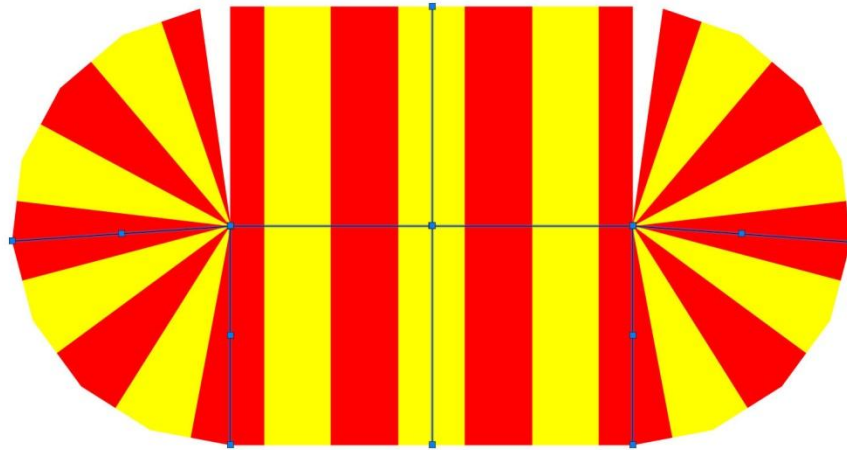
Decals and roof covering

If you have downloaded the Word decal and roof file for this then print all out at 100% don't do any scaling and don't use fit to page and print in good quality, print 4 of the rounded roof section and 4 of the straight roof sections along with the decal sheet. Check with a ruler to make sure they have printed out near the correct size.



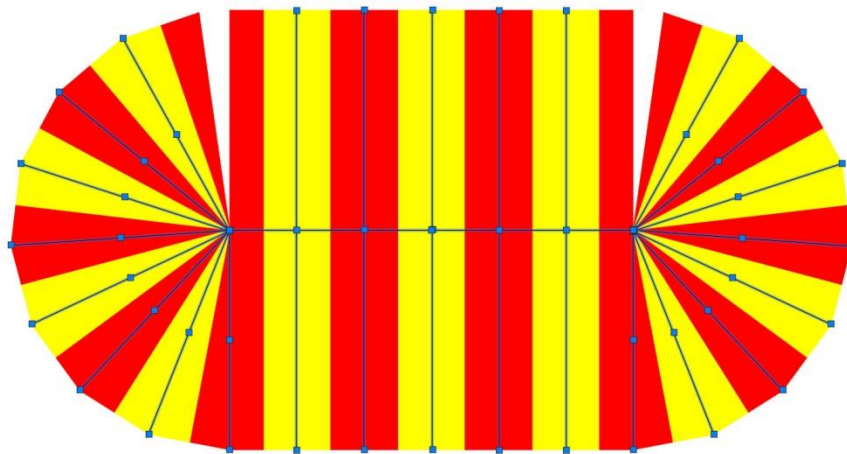
The roof can either be laminated or just printed in paper

Cut out the 8 roof sections leaving sections of the white for gluing or taping as required, fasten them together as bellow.



Using a very blunt implement, make score lines as indicated below

Note the scores are not where the red meets the yellow but central on the colours



Once the lines are scored bend fold them then unfold them

Finally lay this on the roof of the model to glue or tape the last 2 sections together

The decal sheet should either be laminated or covered on both sides with clear book covering or clear tape to prevent bleeding when glued on

You will need to cut out each one with an exacto knife or similar and glue to the rounding boards with superglue or similar

The following images are photos during the build to help visualise things





