PB5A(BL) Pro Build Shed Kit 5A (For the PB5B shed kit, work up to Figure 24 only)

Thank you for purchasing one of our Pro Build Kits. Please check your kit contains the following:
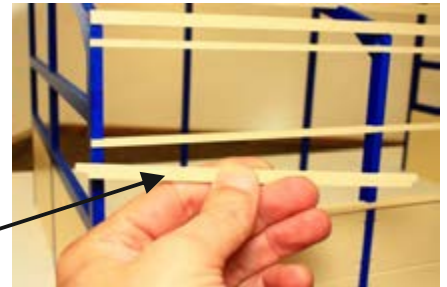
- 2 x Gable ends
- 2 x Internal A frames
- 8 x Pre stressed concrete wall panels for gable ends (these are the smaller ones 90mm wide) have radius corners and a rebate on the edge)
- 9 x Prestressed concrete wall panels for the back wall (these are the larger ones 138mm wide and square edged with no rebate)
- 2 x Yorkshire boarding panels 290mm wide x 58mm high (for side walls)
- 2 x Yorkshire boarding panelsl 142 mm wide x 58mm high (for side walls)
- 4 x Yorkshire boarding panels for gable ends (2 left/2 right)

(Wall Cladding Rail)

- 12 x Wall cladding rails (145mm) – for end bays only
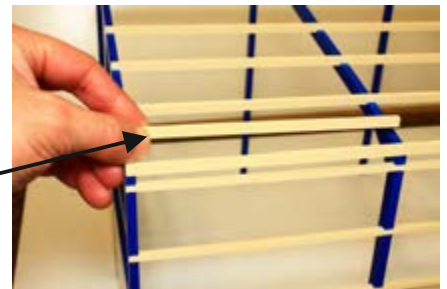- 6 x Wall cladding rails (142mm) – for middle bays only

(Roof Purlin)

- 38 x Roof purlins (145mm) – for end bays only
- 19 x Roof purlins (142mm) – for middle bays only

- 1 x Base

Before you start we recommend setting up a jig to make sure your build is straight and square – in Figure 1 you will see I have used a flat piece of board (approx 700mm x 650mm) and on that I have glued a second piece (approx 260mm x 420mm) to one side. Your jig and work surface must be 100% level as any unevenness will affect the quality of the build and may make the latter stages of your construction impossible (this is down to the fine tolerances the components are machined to).

The tools you will need are:
1) Super Shed Glue
2) A sharp craft knife with a new blade
3) An old tooth brush!
4) Carpenters square
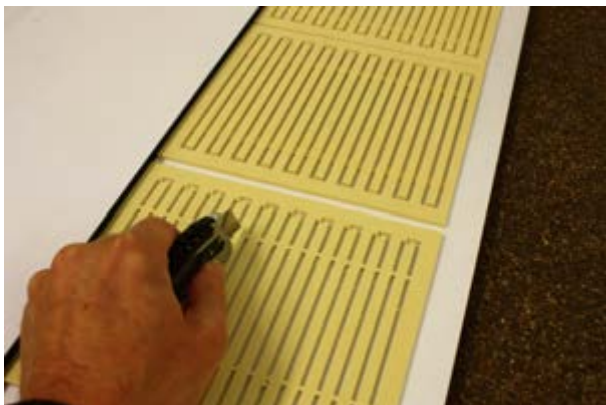5) Plenty of patience

Figure 1
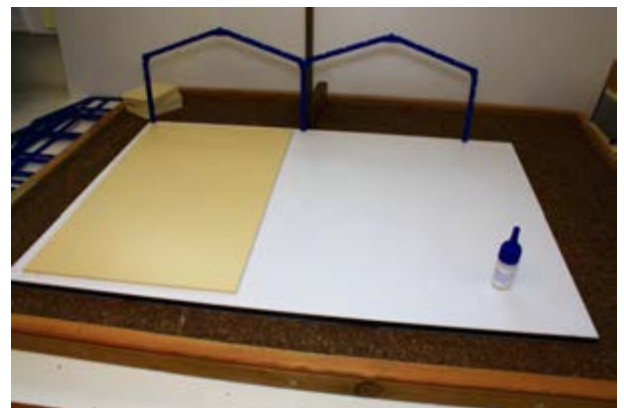

Construction stage 1:

Figure 2

Carefully cut out the roof purlins and wall cladding rails from the matrix using your craft knife (Figure 2). Remove any small pieces of debris on the edges using your tooth brush (do not use sand paper – too harsh). Remember you have 2 different sizes of each, the 145mm purlins and cladding rails are for the end bays and the 142mm purlins and cladding rails are for the middle bays. **Important: DO NOT MIX UP the two sizes or types or you will RUIN your construction.**

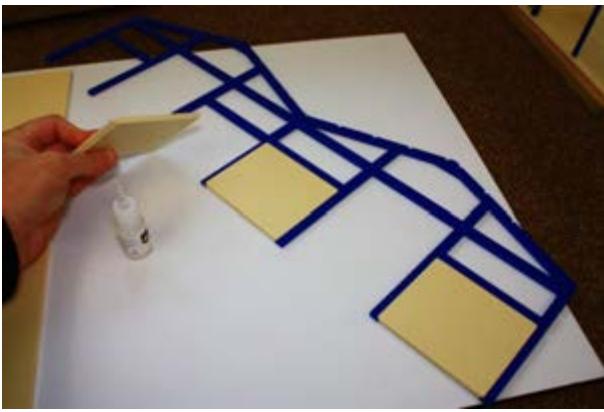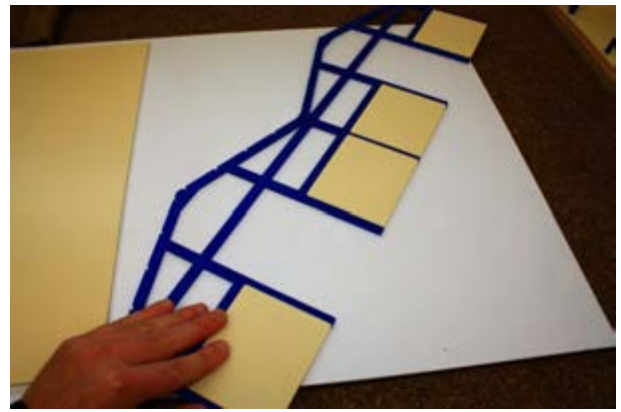**Figure 3**   **Figure 4**

Lay both gable ends down flat on your work surface, offer up the 4 x prestressed concrete wall panels per gable end making sure you are using the panels that have the rebate along the ends and small radius corners. This rebate and radius makes for a very snug and tidy fit within the recessed lower areas of the gable ends and makes the walls flush both on the inside and outside of your shed. Lay a thin line of glue within the recessed area of the gable ends and position the panels into place. Make sure they are square and level with the bottom edge of the wall and hold tight for 10 seconds for the glue to bite. Leave for 5 minutes for the glue to set.

You are no ready to start gluing your prestressed concrete wall panels into place (these are square edged and have no rebate) as you see in Figure 5a, b & c below:
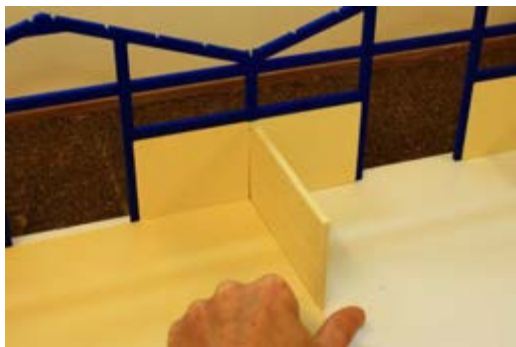

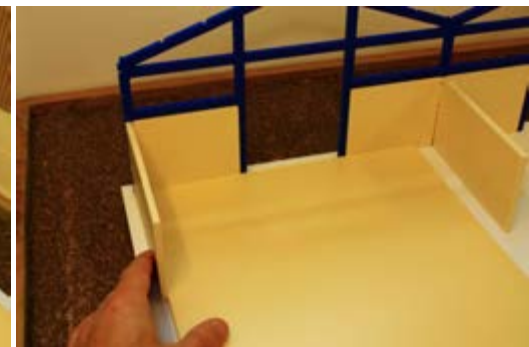**Figure 5a**   **Figure 5b**   **Figure 5c**

Figure 5a: Position your first gable end up against the jig making sure your **gable end is the correct way around so that you can see the channel detail on the prestressed concrete wall panel from the outside of the shed – otherwise your shed will look inside out!** Offer up your first wall panel which will form part of the central dividing wall within your shed using your jig to make sure you are nice and square right from the start – apply a little glue and hold in place for 5 seconds.

Figure 5b: Reposition the jig and offer up a concrete wall panel to the gable end to start forming your right hand wall to the shed. **Make sure your prestressed wall panels are facing the right way so that you can see the channel detail from the outside– otherwise your shed will look inside out.**

IMPORTANT: MAKE SURE YOUR WALL IS FLUSH WITH THE <u>OUTSIDE EDGE</u> OF THE GABLE END, AS YOU SEE IN THE DIAGRAM BELOW:
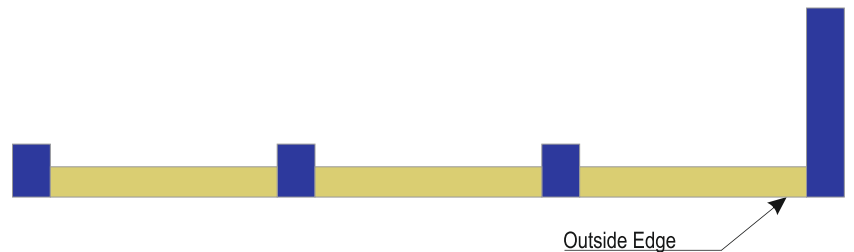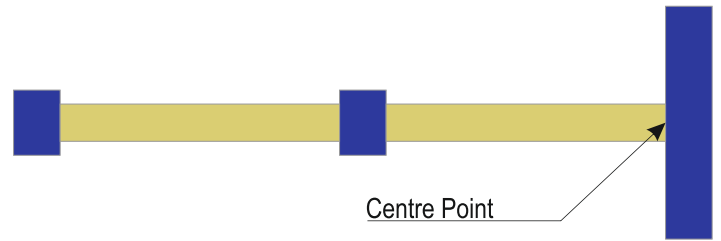

Outside Edge

Figure 7c: Repeat the process to start forming the left hand wall to the shed using your jig to make sure your construction is nice and square. Leave for 5 mins for the glue to set.

IMPORTANT: IF YOUR CONSTRUCTION IS NOT SQUARE, UPRIGHT AND IN-LINE YOUR ROOF PURLINS AND CLADDING RAILS WILL NOT FIT CORRECTLY AND YOU MAY RUIN YOUR SHED – SO TAKE YOUR TIME!!

Figure 6a

Figure 6b

Centre Point

Using your jig as shown above in Figure 6a, offer up the first internal A-frame so it rests up against the first middle concrete wall panel, apply a thin layer of glue along the edge of the concrete panel and glue to the A-frame, making sure your construction is square and upright. Hold for 10 seconds and let go – this will now support itself.

IMPORTANT: YOU MUST CENTRE THE CONCRETE WALL PANEL TO THE MIDDLE OF THE UPRIGHT OF THE A-FRAME (AS YOU CAN SEE FROM THE DIAGRAM IN FIGURE 6b)

Figure 7

Figure 8

Your construction will now be self-supporting and you can carefully apply a line of glue to the right concrete wall panel and offer up the upright of the A-frame and press gently – hold for 5 seconds for the glue to set. **MAKE SURE YOUR UPRIGHT IS FLUSH WITH THE OUTSIDE EDGE OF THE WALL PANEL.** Do the same with the left hand side of the shed as you see in Figure 8. Leave for 5 mins for the glue to set.
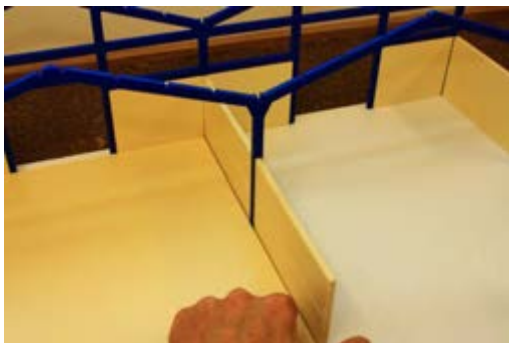
Figure 9

Figure 10

Figure 11

You are now ready to construct the next bay. Start again from the middle (Figure 9) then to the right wall (Figure 10) and then the left wall (Figure 11) making sure your wall panels are nice and square, upright and inline. Leave for 5 mins for the glue to set.

Figure 12   **Figure 13**

Offer up your second Internal A-frame using your jig to keep your construction nice and square as you see above. Start from the middle and apply a line of the glue to the end of the wall panel, press the middle upright of the A-frame up against the wall and hold for 5 seconds.
YOU MUST CENTRE THE CONCRETE WALL PANEL TO THE MIDDLE OF THE UPRIGHT OF THE A-FRAME AS PREVIOUSLY.
Carefully apply a line of glue to the right concrete wall panel and offer up the upright of the A-frame and press gently – hold for 5 seconds for the glue to set. **MAKE SURE YOUR UPRIGHT IS FLUSH WITH THE OUTSIDE EDGE OF THE WALL PANEL.** Do the same with the left hand side of the shed and leave for 5 mins for the glue to set.

Put your construction to one side (not on the floor – someone will step on it!) and position your remaining gable end up against the jig and repeat the process of gluing the middle, right and left concrete wall panels into place as you see below:
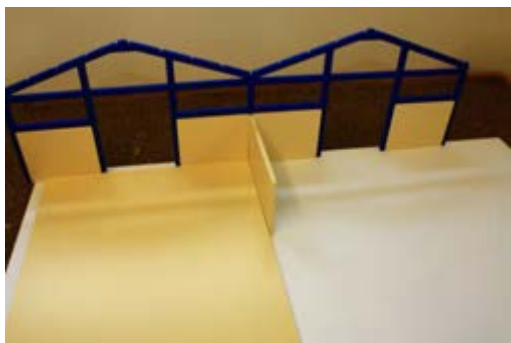
Figure 14   **Figure 15**   **Figure 16**

IMPORTANT: THINK ABOUT WHICH WAY AROUND THE MIDDLE CONCRETE WALL PANEL NEEDS TO BE TO MATCH THE REST OF YOUR CONSTRUCTION (AS ONE SIDE IS SMOOTH AND THE OTHER HAS THE CHANNELLING DETAIL).
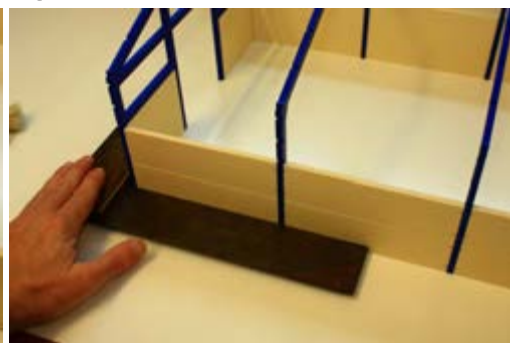Once you have glued all 3 into place, leave for 5 mins for the glue to set.

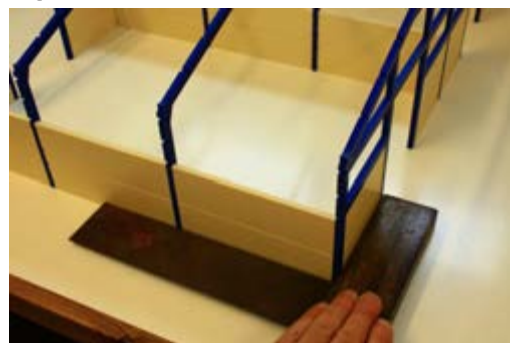**Figure 17**   **Figure 18**   **Figure 19**

Figure 20

To complete the basic framework of your shed, offer up your gable end to the main construction as you see in images above. As you have been very careful to keep everything nice and square, inline and upright, the 2 parts will match up nicely! Apply a line of glue to the middle wall panel first and press up against the middle upright of the A-frame (as in Figure 17), hold for 5 seconds. Then manipulate the left wall panel as you see in Figure 18, apply a line of glue and press up against the left upright making sure all is flush to the outside edge, use a square if necessary as in Figures 19 & 20.Do the same with the right hand side.

 Leave the whole thing for 10 minutes for the glue to set.
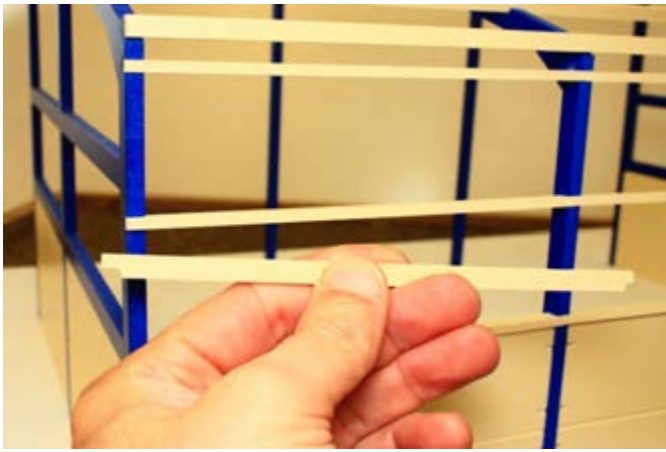
Figure 21   **Figure 22**

The next stage is to glue your wall cladding rails to your side walls. Carefully separate the END cladding rails (as you see in Figure 21) 145mm long from your MIDDLE BAY cladding rails (as you see in Figure 22) which are 142mm long and leave them in 2 separate piles.

Important: the END cladding rails have a larger cut-out to <u>one end only</u> – and this end of the cladding rail must be located into the GABLE END/FRONT A FRAME UPRIGHTS ONLY.

Each bay takes <u>3 </u>wall cladding rails starting from the top of your prestressed concrete wall panel sections working upwards.

Do a DRY RUN first without using any glue, and carefully position the wall cladding rails starting from either end of the shed – you will see they will 'click' into place and make the back wall flush ready to accept the Yorkshire boarding later on. Once you are sure you have the right pieces in the right place, working from one end, apply small blobs of glue to each end of the wall cladding rails and locate into the uprights, hold each one for 5 seconds until the glue bites. Once all done leave your construction for 10 minutes for the glue to cure.

Now you are ready for roof purlins. . Carefully separate the END roof purlins (as you see in Figure 23) 145mm long from your MIDDLE BAY roof purlins (as you see in Figure 24) which are 142mm long) and leave them in 2 separate piles. Put a post-it note on each pile so you don't make a mistake during construction, label them END and MIDDLE – you will thank me for giving you that advice!

Figure 23   **Figure 24**

Do a DRY RUN first without using any glue, so you get used to how the purlins will sit on the A-frames and gable ends. You must make sure the 145mm purlins are used for the end bays only and the 142mm purlins are used for the middle bays OTHERWISE YOU WILL RUIN YOUR SHED.

When happy with the above, start from one end and apply a small blob of glue to each end of your 145mm purlins position into place. You must make sure the purlin is 100% flush with the outside of the gable end and sits perfectly in the middle of the internal A-frame. Repeat for the whole bay working your way from one side of the shed, up over to the other side. **The only really fiddly-bit is the purlin that sits at the top of the side wall – when gluing into place carefully push against the gable end and internal A-frame so the purlin sits flush to the side wall – very important when you go to attach the Yorkshire boarding panels.**

Then go to the other end bay and repeat, making sure the purlin is 100% flush with the outside of the gable end and sits perfectly in the middle of the internal A-frame.

Go to your pile of the shorter 142mm purlins and complete your middle bay, again starting from one side working you way up over the top and down to the other side. If you were accurate with you placing of the end-purlins – the middle purlins will meet at each end giving a nice neat professional look to your shed. Leave the whole shed to set for 20 minutes.

You are now ready to apply the Yorkshire boarding panels to the gable ends of your shed. Carefully remove any fluffy bits using your tooth brush – do this from both sides to give a smooth finish.

Figure 25

Figure 26

Your Yorkshire boarding for the side walls comes in 2 panels, 1 x 2 bays and 1 x 1 bay for each side. Apply a line of glue along the 3 rows of wall cladding rails and along the line of top roof purlins – these are the main contact points for your boarding. Offer up the larger panel making sure it is flush to the gable end and press against the rails/purlins making sure it is straight and level. You will want to see approx 2mm of the top roof purlin showing over the top of your boarding panel – this allows any roof section to sit properly. Offer up the smaller single bay boarding panel and repeat the gluing process. Repeat the process for the other side of you shed. **IMPORTANT – MAKE SURE YOUR BOARDING PANELS ARE THE CORRECT WAY AROUND – THE FLUSH SIDE SITS AGAINST THE SHED – OTHEWISE IT WILL LOOK INSIDE-OUT**
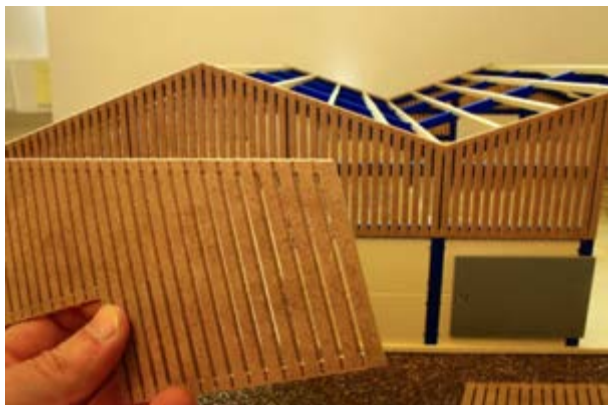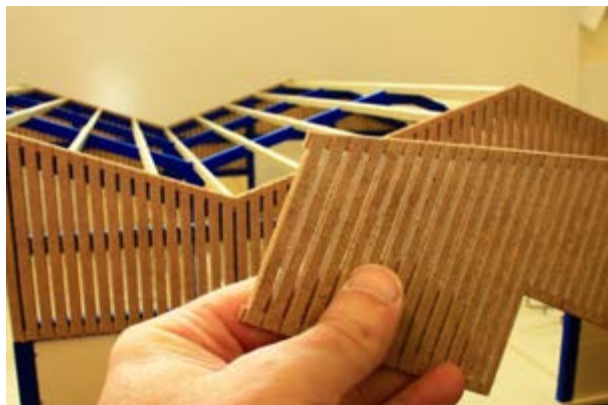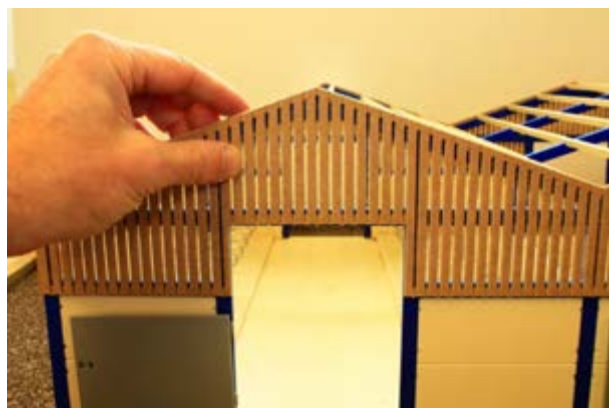
Figure 27

Figure 28

Nearly there! There are 2 parts of the end Yorkshire boarding panels for each gable end but please note **THEY ARE NOT THE SAME**. The panel that fits to the left hand side of each gable end looks as in Figure 27 and is flush along both edges, the panel that fits to the right has 2 small protruding sections to its left edge (as in Figure 28). When they are offered up and glued together this gives the correct spacing for the Yorkshire boarding strips right across the whole gable end.

MAKE SURE THE boarding panels are not inside out (flush side sits against the shed). Carefully remove any fluffy bits using your tooth brush – do this from both sides to give a smooth finish.

Figure 29

Take one gable end and apply a thin line of glue along the main contact points on the frame **(see Figure 29).** Offer up the correct Yorkshire boarding panel (The one that fits the left hand side) – then press and hold it in place for 15 seconds.

Offer the right-hand side Yorkshire boarding panel **(Figure 30)** and repeat the gluing process to the main contact points on the frame. Leave for 5 mins for the glue to dry then repeat the whole process for the other gable end. Leave for 5 mins.
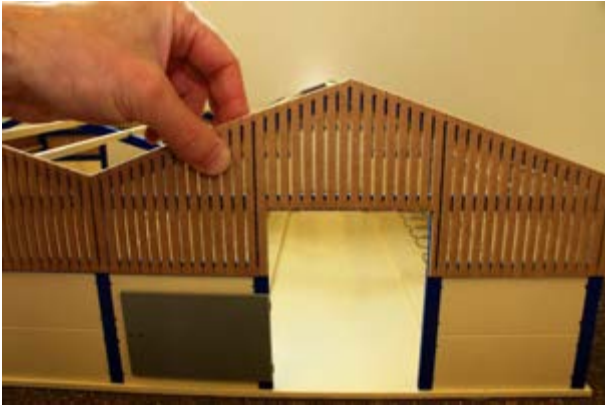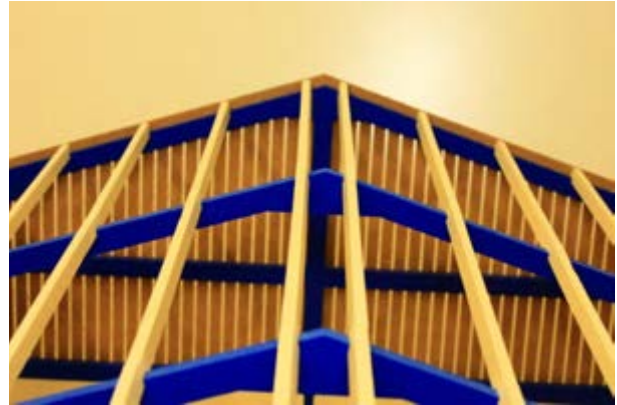
Figure 30

Figure 31

It is important that you make sure the top edge of the boarding panel sits flush with the top edge of the roof purlins for a professional finish (as in Figure 31).

You are now ready glue your shed to the base. You must be very careful now to make sure your construction is completely square – ie the walls are square to each other and they sit square on the base.

Once you are happy the walls are at perfect right angles apply a few spots of glue to the bottom of the blue uprights, position and hold for 10 seconds to create a rigid construction. You will need to be quick with any final adjustments at this stage as the glue bites very quickly! **Job done!**

PS: Some warm soapy water may now be needed to get that hardened glue off your finger-tips!

Any problems please call us – we carry a full range of spare parts if required and
 are very happy to chat on the phone if you would like to go through the construction stages before you commit to your pro-build.

Kind Regards

Paul

Owner – Brushwood Toys