ISSUE: 0121
FIXING PACK CODE: XTENDFP

Xtend by forest

Thank you for purchasing your Xtend Garden Building from Forest Garden. Simply follow these step by step instructions and our top tips for a straightforward assembly. If you have any questions or need advice, our friendly team is here to help.

XTEND 3.0 GUIDE BOOK (3.0x2.5M)

Missing Something?
Call our aftersales team on
0333 777 7089

Need more information?
Call our technical team on
0333 321 3142

Visit our website for more information
www.forestgarden.co.uk

Forest Garden, Oak Drive, Hartlebury Trading Estate, Hartlebury, Worcestershire, DY10 4JB

'Fixtures & Fittings' Box Contents

All of our Xtend garden buildings are constructed in the same way. They simply come with slightly different components depending on the size you have purchased. Don't worry if your 'fixtures and fittings' box contains many extra fixings at the end of the build (you haven't missed a bit!) we have sent you a **generic fixtures and fixings box** to suit the Xtend garden building Collection.

① 6.7 x **150mm** Screws QTY: **40**

② 6.7 x **125mm** Screws QTY: **90**

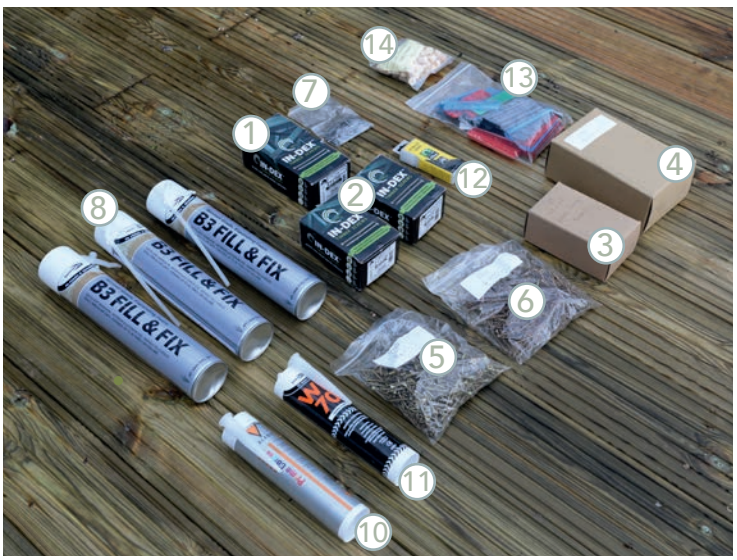
③ 7.5 x **112mm** Screws QTY: **35**

④ 5 x **80mm** Screws QTY: **280**

⑤ 4 x **50mm** Screws QTY: **220**

⑥ 4 x **35mm** Screws QTY: **430**

⑦ 1.6 x **30mm** Panel Pins QTY: **155**



750ml B3 Fill & Fix Expanding Foam ⑧ QTY: **3**

'Star' Drill Bit ⑨ QTY: **1**

300ml Anthracite Grey Silicone (7016) ⑩ QTY: **1**

310ml Translucent Silicone ⑪ QTY: **1**

10 x **10mm** Staples ⑫ QTY: **1000**

1-6mm Glazing Packers ⑬ QTY: **10 of Each**

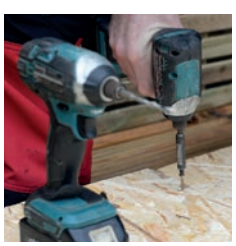
12mm Wood Plugs ⑭ QTY: **100**

Please keep plastic bags and small parts away from children.

Tools Required

Assembly is relatively straightforward if your follow these step by step instructions. We recommend getting everything aligned properly before screwing together and that **screw holes should be pre-drilled** to avoid splitting the timber.

We recommend using the following tools (not supplied):


Drill & 2-6.5mm Drill Bits


Rubber Mallet / Hammer


Tape Measure


Spirit Level

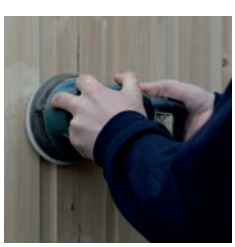

Ladder


Foam Gun


Sharp Knife (Stanley Knife)


Hand Saw/Hand Circular Saw


Heavy Duty Staple Gun


Sander

IMPORTANT
Assembly requires 2+ adults & 2+ man lifts at all times.

REMINDER
Always pre-drill before screwing.

Health and Safety

We strongly recommend that PPE (Personal Protective Equipment) is used throughout your Xtend garden building build to ensure you are protected from any potential health and safety risks. **Do not exempt yourself from wearing PPE even if the job 'only takes a few minutes.'** Use any guidance stated on your fixings supplied and where you feel it is applicable to use PPE as part of your step by step assembly.

Chemical Information

Due to the high quantity of products, we have supplied and recommended to use, **we strongly recommend checking all of the chemical information, application, shelf-life, storage, cautions and health and safety sections which will be listed on the back of each product.** For further information, these specific branded products can be found online and they will have PDF technical sheets ready at hand to access. If you have any further concerns or queries, you can contact the suppliers/manufacturer's for extra information.

Do not leave empty containers where residue could be harmful to children, animals or the environment. Replace lids and remove any containers to a central disposal point in accordance with local regulations. Do not pierce can. In the event of spillage remove all sources of ignition, ventilate the area, remove people from confined areas. Material should be mopped up immediately with an inert absorbent material such as sand.

B3 Fill & Fix Expanding Foam Extra Information

B3 Fill & Fix Expanding Foam is just like many other types of expanding foam. It is vital that you know how to set up and use the expanding foam correctly for an easy application during your assembly. As this is a generic fixing pack and we do not supply any tools, the expanding foam does require a **foam gun.**

Preparation & Application

Before applying your expanding foam, you need to ensure that the surfaces to be bonded must be firm, clean, dry and free from dust, grease or contaminants to prevent any hinderance for the adhesive to work effectively. All of the construction components that will be in contact with the expanding foam must be properly prepared prior to foam application. It is advisable to have a 'Foam Clear' at hand.

Ensure your foam gun is set up correctly and shake your expanding foam can vigorously prior to use. Use the gun with the can uppermost and as close to vertical as possible. Otherwise as a result, you will have poor foam discharge during your application. Also, take care on not to overfill joints when applying to your base kit panels. Fresh foam spills can be removed straightaway or if left to harden, they can be removed mechanically with a scraper or knife.

Cleaning The Nozzle

As the expanding foam will be in use over the 2 days of the Xtend garden building assembly, it is best to keep the nozzle on your foam gun clean enough to prevent any blocking of the product when next coming to use it. Excess foam can be removed whilst still wet using 'Bond It Foam Cleaner' or 'Bond It Multi-wipes.' Once the expanding foam has cured, it can only be removed mechanically. Store and transport upright in cool, dry conditions between 5 and 25°C.

Before You Start

Do not attempt assembly of your building until you have checked the **'component list'** at the back of this guide book to ensure all parts are present. You must notify our Technical Helpline of any missing or damaged components within 14 days of receipt of the building.

In the unlikely event of any problems, issues or for any questions, please contact our Technical Helpline on **0333 777 7089.** Before you call please make a note of any parts that may be damaged or missing.

Please refer to your **fixtures and fixings box** for supplied screws, expanding foam and nails. Tools for erecting and preserving the building are not supplied as part of the purchase and are listed on page 6 for a guide.

Guarantees are limited to the replacement of incorrect or damaged materials. Your statutory rights are unaffected.

Assembly Guide

Building your garden room is relatively straightforward for anyone with a good standard of DIY or building experience. In general, it does not require any special skills, but it will require a logical approach and will sometimes require some general carpentry. **If you have any doubts as to your ability you should contact Forest Garden and arrange a professional team to assemble the building for you.**

You should also pay special attention to the possibility of surrounding raised ground draining onto the slab or under your garden room. **Building the base correctly is very important** – cutting corners on this part of the project will potentially make assembly difficult, and jeopardise the longevity of your garden room.

For more information on building your base please refer to the **Base Preparation** section mentioned in this guide book.

It is strongly recommended that you build your garden room in dry conditions for the best building experience and results.

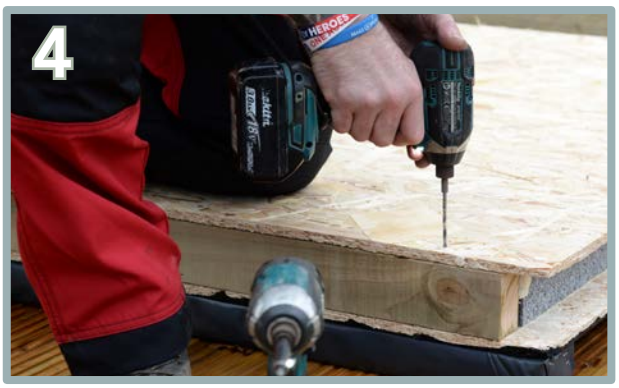
In addition to this written guide, we also have a supplementary 'how to' video guide which can be viewed at **forestgarden.co.uk** if you would like any extra guidance during your step by step build.

The step by step assembly instructions are partly generic. The floor plans provided are specific to your Xtend garden building but a lot of the imagery is generic, as the build is relatively the same for all Xtend garden buildings. The only main differences are the quantities of components provided.

Lay the bearers down and spread them out roughly ready to position the floor panels on top.

Place the first floor panel (B) on top of the two bearers and position it half way onto the second bearer. The black side covered in tar will be on top of the bearers as shown above.

Ensure the panel is flush around the edges to the first bearer. Ensure the floor panels on the bearers are level using a spirit level as a guide.



Pre-drill for every process before securing with screws. Pre-drill 5 holes along the edge of the first floor panel. Do not screw in the other side at the moment.

Using 125mm screws, screw through the floor panel into the floor bearer beneath. Repeat the process for the 4 other screws. Ensure each screw is countersunk.

Place the second floor panel (C) onto the middle bearers. Ensure the panel is positioned half way on both bearers.

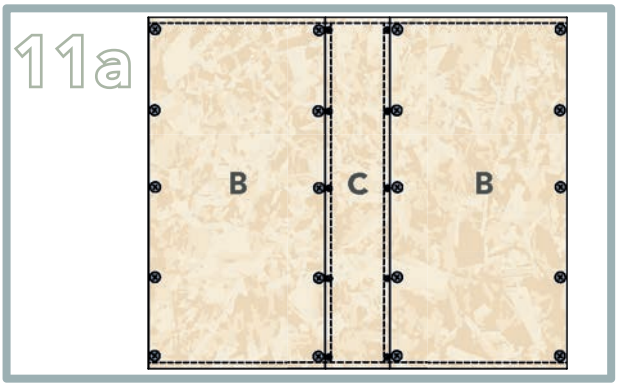
Using a rubber mallet, knock the second panel into the first for a tight fit.

Knock on the front and back of the second panel to ensure it is flush on both edges to the first panel and floor bearers.

Using 4 x 35mm screws, pre-drill and screw where the adjoining panels intersect. This will secure the floor panels together.

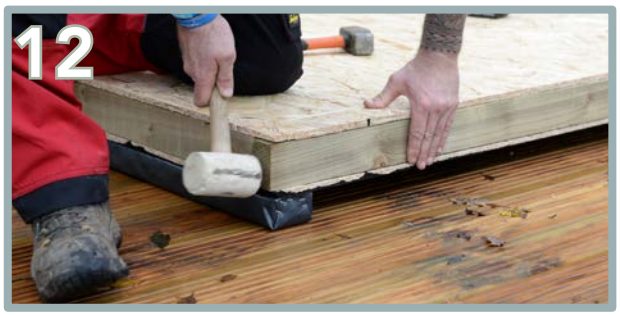
Place the third floor panel (B), knock into the second panel and ensure it sits flush on the final floor bearer. Repeat the process using 35mm screws in between the second and third panels.

Once happy that all panels are in the correct positions, further secure with 5 x 125mm screws along the third panel edges and the first panels outer edge into the bearers beneath.



Screw positions are shown in the diagram above. The larger screw heads are 125mm and the smaller ones are 35mm. The final floor result should now be fully secured and flush around all faces of the bearers beneath. Use spirit level to ensure the floor is level before continuing with the build.

The components provided will be labelled accordingly to the components list, at the back of this guide book.



Insert and knock the floor capping (AO) into place using a rubber mallet. Ensure it is flush to all edges.

Pre-drill and use 4 x 125mm screws and ensure each screw goes into the bearer beneath. Screw 35mm screws in between the 125mm screws. Repeat process for the other floor capping.

Apply OSB floor sheets (AF) on top of the SIPS panels one at a time. Ensure they are flush to all edges and screw into the corners to keep secure.

Using 35mm screws, screw 3 across the top and 5 down the sides of each OSB sheet. Screw along the edges first.

Screw the central screws into place, resulting in 3 in a row. This will result in 15 x 35mm screws per OSB sheet.

Ensure that all OSB sheets fit proportionally onto your floor.

Some pieces may be oversized. If this is the case, saw the excess off after the piece is screwed into place, to create a flush finish.

Start to unwrap the DPC roll and choose a starting point on the base's outer face. Ensure it covers half of the bearers and staple into place.

Continue to wrap around the base. We suggest one person unwraps and the other will follow behind, stapling in place.

Once fully wrapped around the base, overlap the starting point and staple into place.

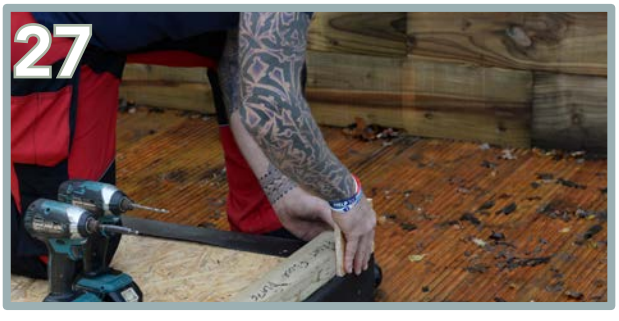
Using a Stanley knife, cut the DPC at the corner to create 2 pieces to easily fold onto the OSB sheets and staple into place.

Continue folding the overhang and corners of DPC onto the OSB sheets as you make your way around and staple in place.

The final result is shown above.

As part of your assembly pack, you will have been provided with an off cut of OSB to use as an 11mm guide when positioning the floor plates.

Starting with the back floor plate (AO), ensure it's flush end to end and provide 11mm spacing from the bases' back edge. Pre-drill and screw 4 x 125mm screws along the timber.

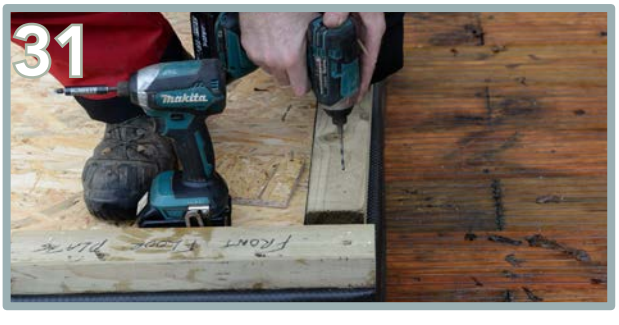


Repeat the process with the front floor plate (AO). Ensure the one end is flush to the side and 11mm from the front edge.

Pre-drill and use 4 x 125mm screws for the front floor plate (AO) Apply 2 x 125mm screws per end. Measure out your front panel (O) and ensure your front panel is placed flush to the edge.

Mark and cut off the excess timber from the front floor plate. This will remove any timber from your door opening.

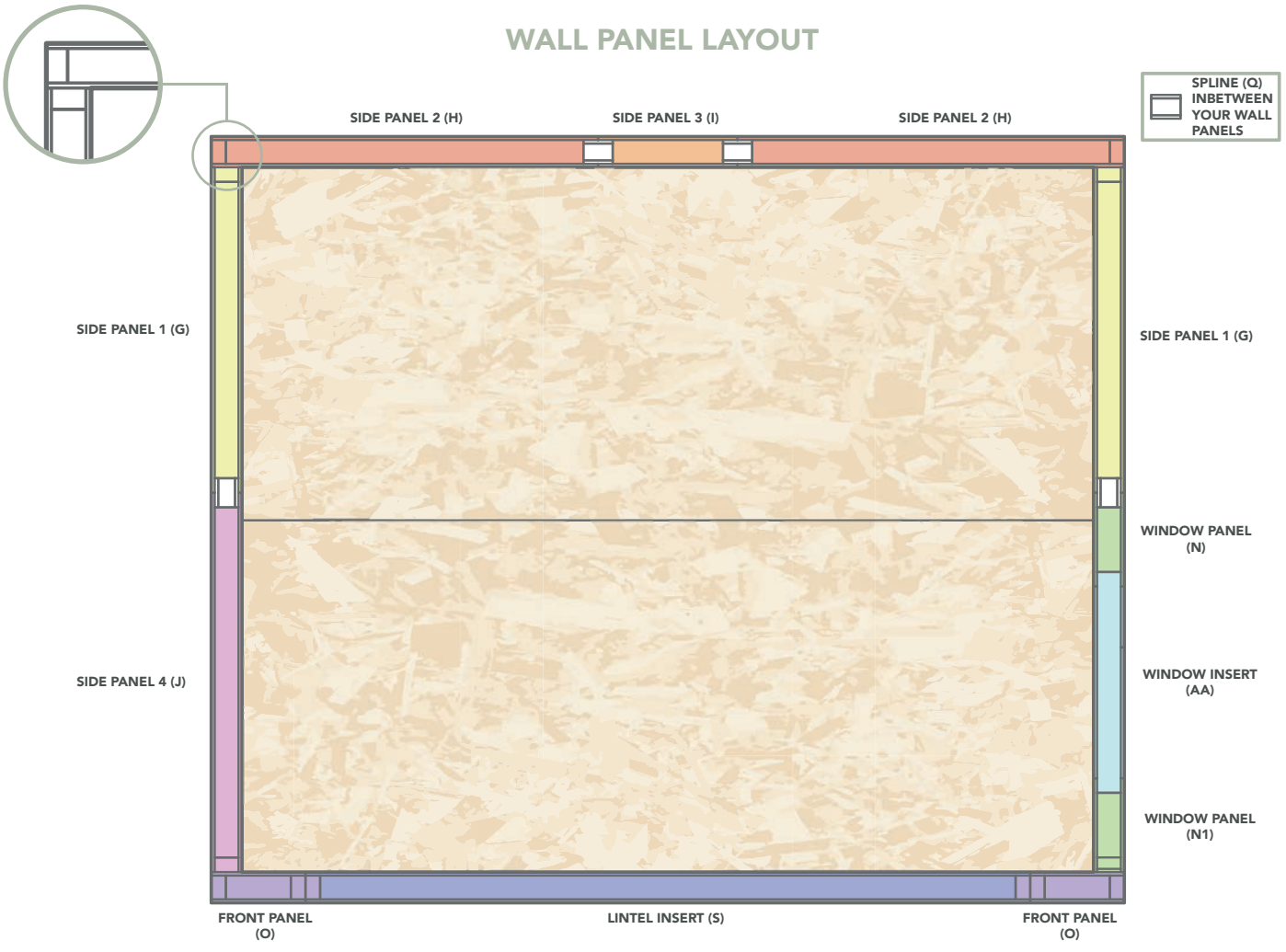
Your side floor plates (AK) will fit in between your front and back plates. Ensure 11mm from the outer edge and 11mm at each end. Once happy with the position, pre-drill and screw into place using 4 x 125mm screws.



Repeat the process on the other side floor plate (AK) and screw into place.

The final result is shown above.

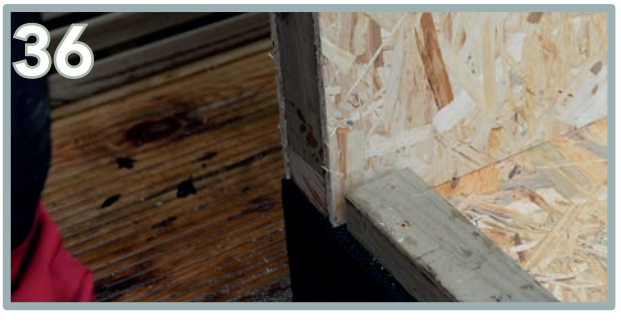
WALL PANEL LAYOUT



Next, start to build your walls. Each wall panel is labelled accordingly to the layout shown above and the components list at the back of this guide.

Begin the build at the left back corner, starting with Side Panel 2 (H). Insert the expanding foam provided into the bottom groove.

Place onto the floor plate and the wall panel will sit flush to the edge.



In the left hand corner, the wall panel will be flush to the edge and the floor plate as shown above.

Add the expanding foam into the side groove of the Side Panel 1 (G) in the left back corner and butt it up against the first wall panel. Have one person holding onto the wall panel to prevent movement.

Pre-drill and using the star drill bit provided in your fixing box, screw through the back into the side wall panel using 3 x 150mm screws (top, middle and bottom).

There will be smaller Spline panels (Q) that will be in between the grooves of some panels. Add expanding foam into each groove of the spline panel and apply them accordingly to the wall panel layout. Secure with 5 x 35mm screws.

Add expanding foam into the inner side groove and into the bottom groove of the second back panel (I). Slide on the floor plate and knock into place.

Repeat the same process on the other back panel (H) and knock into place.

Repeat the same process for the right hand corner (G). Add foam and knock into place. Ensure the panel is flush to all edges as mentioned and shown above.

Pre-drill and screw through the back panel (H) into the side wall panel (G) using 3 x 150mm screws (top, middle and bottom).

Continue on the right hand side panels as shown above (N), adding the expanding foam into the bottom grooves. Place and knock into the other side panel.

Apply the side wall panel (N1) as shown above, leaving the provided space for the window insert. This is labelled on the layout.

Apply the front wall panel (O) and butt up against the front side wall panel just secured. Ensure all edges are flush.

Position the screw roughly 45mm from the outer edge. Pre-drill and screw through the front into the side wall panel using 3 x 150mm screws (top, middle and bottom).

Knock the window insert (AA) into the section provided. Ensure the top is flush.

Position the screws on the wall panels OSB and screw into the window insert batten behind. Secure into place using 4 x 35mm screws internally and externally, 2 x 35mm screws each side of the window insert.

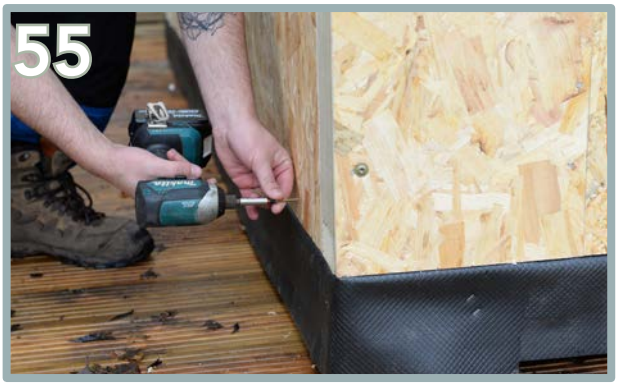
Apply the last left hand side panel (J). Apply expanding foam into the bottom groove.

Slide and knock into place.

Apply the other front wall panel (O). Pre-drill and screw through the front into the side wall panel using 3 x 150mm screws (top, middle and bottom).

Insert the lintel piece (S) and knock into place. Ensure it is flush on the top.

Position the screws on the Lintels OSB and screw into the wall batten behind. Secure into place using 4 x 35mm screws internally and externally, 2 x 35mm screws each side of the lintel insert.



Once all of the wall panels are up, begin to secure each wall panel to the floor plate underneath. Use 3 x 35mm per panel externally.

Repeat the process, using 3 x 35mm per panel internally.

Internally position the screws each side of the adjoining split line. Use 5 x 35mm screws for each side of adjoining panels with the spline panel inside from top to bottom. Repeat this process for every adjoining panel.

Use the expanding foam into the top groove, ready for the wall plates. Start at the front.

Insert the front wall plate (AO), knocking into place. Expect this to be tight fitting. Ensure it is flush to the top and ends.

Pre-drill and secure with 4 x 125mm screws. Repeat the same process for the back wall plate (AO).

Apply expanding foam to the side panels groove.

Insert the side wall plate (AK). Pre-drill and secure with 4 x 125mm screws. Repeat the process for the other side wall plate and back wall plate with expanding foam and 125mm screws.

Further secure each all of the wall plates with 3 x 35mm screws externally and internally, through the OSB into the plate, in between the 125mm screws.

Position the firring (AB) and butt up against the front wall panel.

Use 2 x 125mm screws to secure the component within the thicker section.

Use 2 x 35mm screws to secure the component within the thinner section. Repeat this process on the opposite side.

Lift up the first roof panel (V). Ensure at least 2 adults can lift up the roof panels carefully. Measure the overall width for the roof and allow 2mm each side in case of a slight oversize in roof panels.

Position the back of the roof panel. Using the spirit level as a guide, the top OSB sheet on the roof panel needs to be flush to the back edge. Use 4 x 150mm screws along the edge.

Use the spirit guide as a reference to screw through the roof panel into the side wall beneath. **Top Tip - Use the canopy T&G panel (AT) as a reference for the correct overhang size.**

Lift and position the second roof panel (W).

Use expanding foam in the groove of the roof panel and knock into place. Ensure the roof is flush to the front and back of the first roof panel.

Pre-drill and screw 5 x 35mm screws, where the adjoining panels intersect. This will secure the roof panels together. Then secure the first roof panels corners with 2 x 150mm screws.

Secure the second roof panel to the front and back panels. Use 2 x 150mm screws at the back and 2 x 150mm screws at the front.

Lift up the final roof panel (V) and apply expanding foam into the inner groove as shown above.

Knock further into place to allow the roof panel to be as flush as possible to the wall face.

Pre-drill and screw 5 x 35mm screws, where the adjoining panels intersect.

Repeat the same process as the first roof panel using 4 x 150mm screws along the edge to fully secure the roof. Then secure the third roof panels opposite corners with 2 x 150mm screws.

If there is a 2-5mm overhang, don't worry this won't affect the rest of the build.

Use expanding foam in the roof panels groove across all 3 panels.

Insert the roof panel cap (AR). Use 4 x 125mm screws through the panel cap and into the wall panel. Use 3 x 35mm screws, in between the 125mm screws to fully secure.

Use expanding foam and knock the roof panel cap (AR) into place. Repeat the same process. Ensure they are flush to all edges.

Use 4 x 80mm screws into the panel cap. Use 3 x 35mm screws, in between the 80mm screws to fully secure.

Begin to unwrap the breathable membrane. Position the membrane 45mm from the ground.

Starting with the bottom section, pull the membrane tightly and staple into place.

Then warp the excess around the corner and staple the starting point into place.

Continue unwrapping the membrane, pulling tightly and stapling into place.

Once the starting point has been overlapped, cut off the excess and staple the end of the material into place.

Repeat the same process for the top half of the building. Ensure the starting point is flush to the top of the back wall panels.

Add additional staples to keep the membrane in place. Be careful not to staple into the door and window gaps.

There will be a slight gap at the front and on the sides due to the angle of the roof.

Using a Stanley knife, remove the excess from the door section, using the walls as a guide to ensure it is cut straight.

Repeat the same process to remove the excess from the window section.

Using the excess membrane, cover the front flush up to the roof.

Staple into place and remove the excess from the door section.

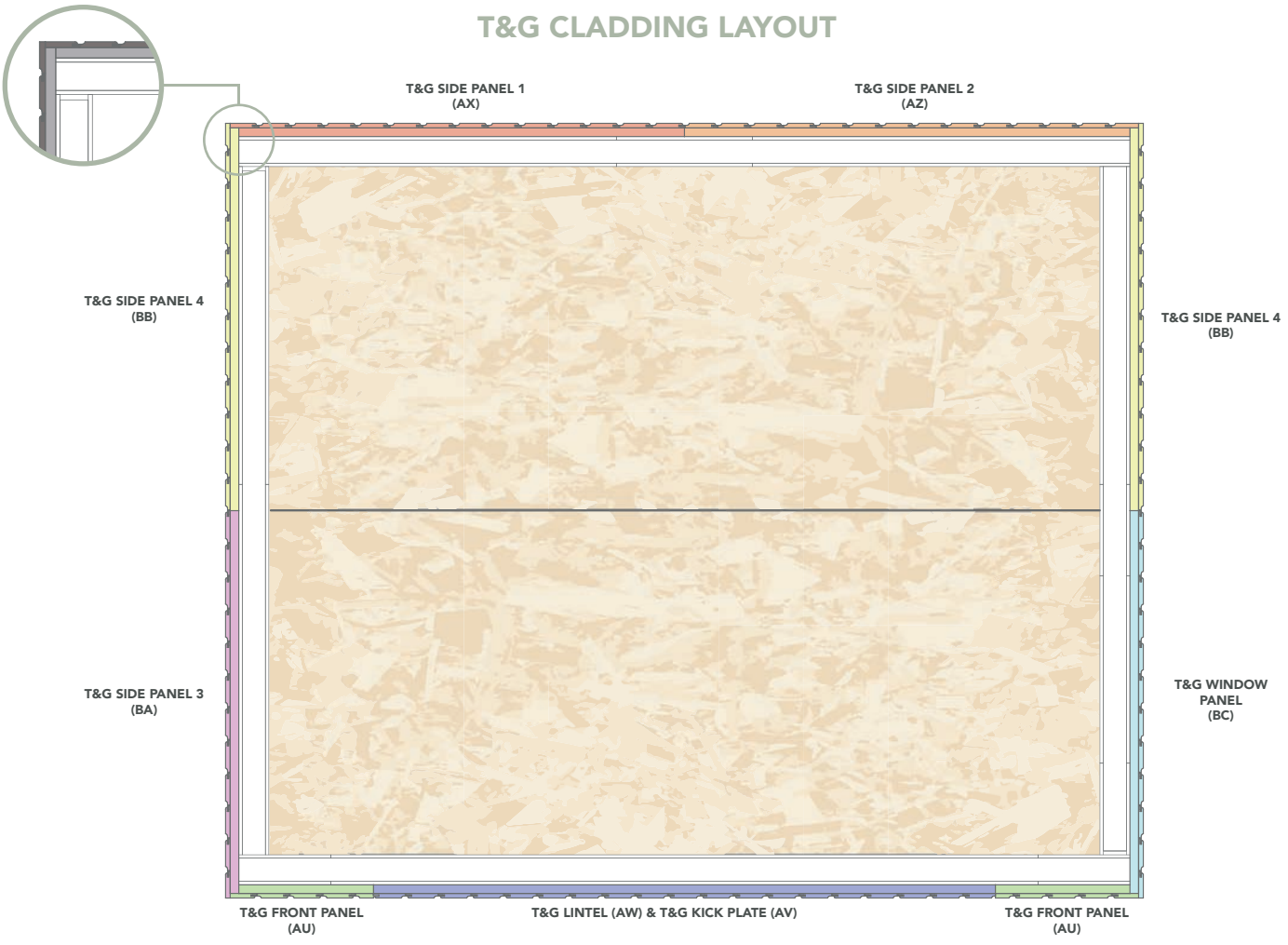
Use the excess membrane to cover the angle on the side panels.

Fold onto the roof, stapling into place.

Remove the roof overhang excess.

The final result is shown above. You do not need to add membrane to the canopy / the roof overhang.

T&G CLADDING LAYOUT



Begin applying the T&G cladding at the back (AZ).

At each side, there will be a slight overhang of the T&G board. The battens edge underneath should be flush to the end. Use the 45 x 28mm batten as a guide to leave 45mm from the ground.

Repeat the same process for the second back panel (AX). Softly knock the second back panel into the first, so the T&G interlocks the panels together. Use a rubber mallet for a softer application.

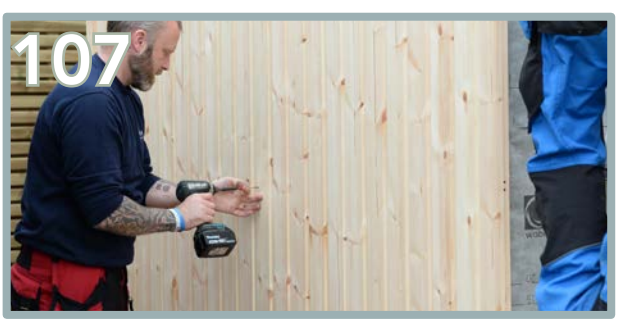
Use 6 x 80mm screws on each panel, 3 x 80mm down each side of the cladded panel, through the batten and into the wall panel behind. Leave the screws slightly out in case of adjustment.

Continue onto the side panels (BB). Knock the first panel in place and ensure it is butted up against the back panel overhang.

Use 6 x 80mm screws per panel. Ensure you use 3 x 80mm screws down each side of the cladded panel.

Ensure the cladded panels are 45mm off the ground. If you are using the batten as a guide, slightly lift up the secured panel to ensure it is carefully removed to prevent any damage.

Apply the next side panel (BA). Softly knock the second side panel into the first, so the T&G interlocks the panels together. Use a rubber mallet for a softer application.



Using 3 x 80mm screws, screw the one side into place.

The batten and the T&G board will overhang at the front, as indicated on the layout shown above. Pre-drill ready, as these 3 x 80mm screws will go into the front panel.

Repeat the same process on the opposite side (BB). Start at the back and butt up against the back panels T&G board. Screw into place.

Ensure the opening of the cladding is flush around all edges to the window opening provided (BC). If not aligned properly, this will cause issues during the window installation.

Apply the front panel (AU). Ensure it is butted up against the side panel and flush to the door section. Use 6 x 80mm screws per panel. Ensure you use 3 x 80mm screws down each side of the cladded panel.

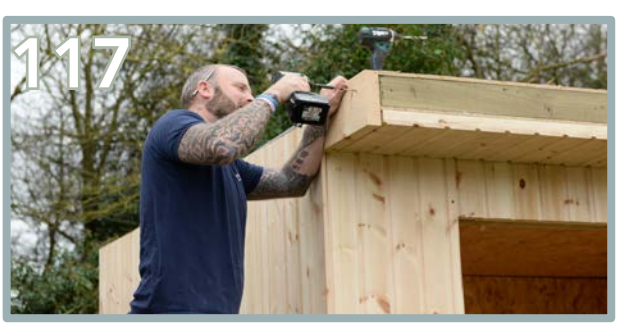
Use 3 x 80mm screws for the other edge of the side panel (BC) and screw into the front panel (AU) batten to secure together.

Repeat the process for the other front panel (AU).

Apply the lintel panel (AW). This will fit in between the front panels. Use 6 x 80mm screws. Make sure to drill through the battens beneath.

Repeat the same process as the lintel for the kick plate panel (AV) that goes underneath the door opening.

Apply the canopy panels (AT) one at a time. Ensure they are flush to all edges. Apply 6 x 80mm screws per panel.



Using 2 x 80mm screws, secure the side fascia. Ensure this is flush to the top and front, whilst butting up against the T&G side panel. Repeat this process for the other side.

Position the front fascia. Ensure it is flush to the top and to the side fascia's outer face. Use 3 x 80mm screws centrally across the fascia. Repeat this process for the other front fascia.

Unwrap the EPDM out onto the floor first, then measure out on the roof to ensure an equal overhang around all edges.

Fold the EPDM back to half way across the roof - we recommend two people for this. Be careful when moving on and around the roof to prevent any possible injuries.

Pour the glue into a paint tray and use a roller for easier application.

Apply glue to half of the roof and ensure to reach up to all of the edges.

Roll the EPDM half way on to the glue. Use a brush/broom to create an even and flatter finish. You need to act quick once the glue has been applied.

Repeat on the opposite half. Fold the EPDM back up until the point where the glue ended on the previous application.

Continue with the glue application on the OSB roof surface as much as possible.

Finish with a final brush on the EPDM to produce a flat and even result.

Underneath the EPDM, you will need to secure the back roof battens to the back T&G Panels (AX & AZ). Ensure the battens edge is flush to the top of the T&G Panel. Secure with 3 x 80mm screws per batten.

Before adding the plastic roof trims on the sides, the angled roof battens need to be applied to the gaps above the T&G panels. Fold the edge of the EPDM and slot in the batten onto the T&G side panel (BB).

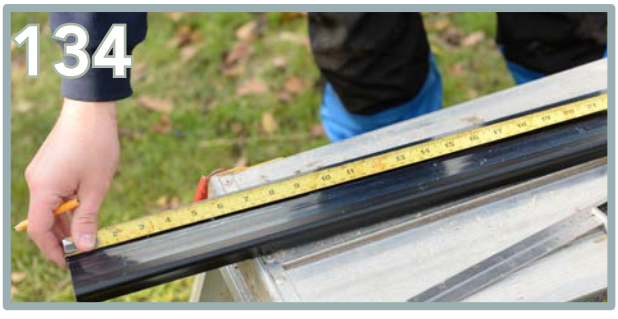
Screw into place using 2 x 80mm screws. Ensure the batten is butted up to the T&G panel and wall panel behind.

Repeat the same process for the smaller batten on top of the taller T&G side panel (BC) & (BA). Screw into place using 2 x 80mm screws. Repeat the process on the opposite side.

Fold the EPDM in a tucked position as shown above.

Slot the plastic trim on the top edge, flush to the back.

Use the pins provided with the plastic trims. Pin into the batten behind to secure in place.



The other plastic trims will need to be measured out and cut using a hand saw to fit next to the fixed roof trim. Further detail will be shown throughout the application of the trims below.

Apply the piece previously cut to size. Ensure it is flush to the front edge and butt up against the plastic trim already pinned into place.

Use the clips provided to clip the pieces together. Repeat the same process on the opposite side.

Measure and cut the plastic trims into 2 equal pieces. Ensure each end meets the side trims. Pin these into place. Add the clip in the centre of the adjoining trims.

Before applying the corners onto the trims, you need to remove the plastic support. Use a Stanley knife to score an outline to weaken the support.

Simply break the excess off to produce the required gap as shown above.

Hook and position onto the corner. Pre-drill to provide a hole for the pin.

Using the pins provided, pin into place. Repeat on the opposite corner.

Once the plastic trims are complete around the roof, using a Stanley knife remove all of the EPDM excess. Use the plastic trims as a guide. Be careful not to cut the T&G panels behind.

Remove the timber excess from the window section before inserting the window frame. Take out any screws in this section and cut with a saw, using the inner edge as a guide.

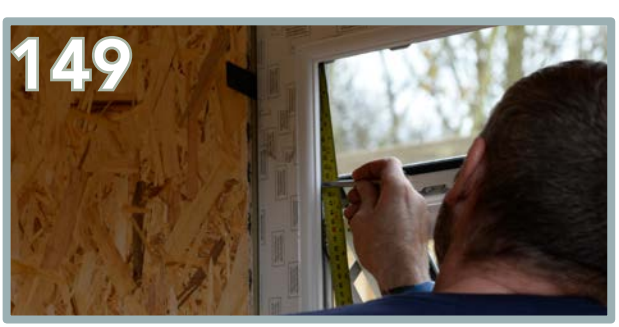
Remove any packaging from the new frame and screw the sill into the bottom of the frame. Use 2 x 50mm screws and ensure not to penetrate the inner skin of the frame.

Be sure to seal the ends of sill with the caps provided to prevent moisture from tracking along into the wood work.

Apply adhesive silicone on to the base and carefully position the new frame into the aperture. Ensure to centralise it.

Insert packers underneath to level it and maintain the 5mm expansion gap. Ensure the back of the frame is in line with the OSB sheet inner face as shown above.

Check that frame is both level and plumb, then drill fixing holes into the frame sides. Pre-drill with a 6.5mm drill bit.



These should be drilled 150mm from the top and bottom corners and 300mm from the 150mm point at both sides. Use packers at the fixing points to avoid distortion to the frame.

Fix the sides of the frame to the wall panels using the star head 112mm screws at the measurements marked out. Don't forget to fix the top and bottom of the frames.

Apply the window handle with the screws provided. Remove the hole caps and drill the screws into the space provided. Then cover the holes back up with the caps.

Using a chisel, break off the excess ends of the packers to create a neat finish. Remove the beading around the edge, ready for the glazing to be inserted.

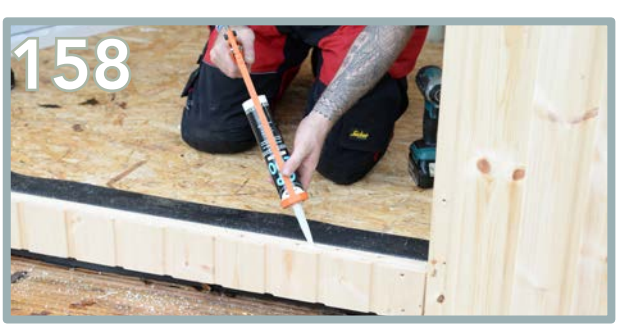
Apply packers with the adhesive silicone. The glass should be packed at diagonally opposing corners to hold the casement square, using the toe and heel process.

Place the top pane into position, ensuring it is centralised and packed correctly, holding the pane square.

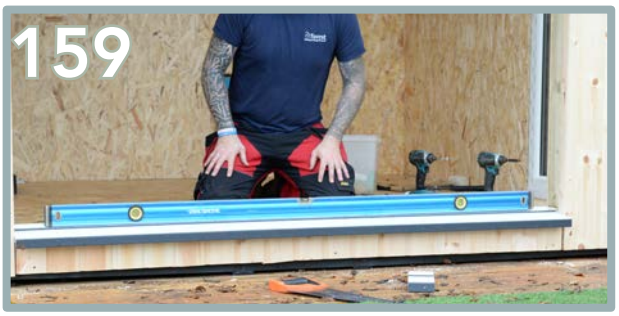
As the pane is positioned, the beading can be installed using a smaller rubber mallet and tapped securely back into place. Be careful to not aim at the glass pane.

Repeat the same process for the bottom pane, ensuring it is centralised and packed properly with the toe and heel process.

The door ledge will be oversized by 100mm. You will need to measure and cut off the excess.



Apply the adhesive silicone in the door section. Be sure to seal the ends of sill and frame assembly to prevent moisture from tracking along the sill and into the wood work.



Place the ledge onto the silicone. Ensure it is level and the back edge meets the first edge of the back OSB sheet (The same positioning as the window).

Lift and angle the frame and sit into the ledge. Butt up against the wall panel.

Check that frame is both level and plumb, then drill fixing holes into the frame side.

These should be drilled 150mm from the top and bottom corners and 300mm from the 150mm points with the 112mm screws.

(This section is only for the 'Xtend Plus' doors and side window. This step will not apply to the standard option). Use 3 x 35mm screws to secure the metal capping.

Insert the window frame into the left hand side of the double doors. The metal cap will slot into place.

Drill 150mm from the top and bottom corners and 300mm from the 150mm points with the 112mm screws into the double doors and into the wall panel on the opposite side.

Further secure the window with 1 x 112mm screw into the top and 1 x 112mm into the bottom.

Remove the plastic strips from the bottom of the door frame. Keep hold of these pieces to re-apply afterwards.

Drill 150mm from the both internal sides of the double doors. Use 112mm screws to screw into place at each side into the bottom of the frame as shown above.

Then screw 1 x 112mm screw into the centre.

Repeat the process through the top. Drill 150mm from the both internal sides of the double doors. Use 112mm screws to screw through the top of the frame as shown above.

Repeat the same process centrally. Screw 1 x 112mm screw in the centre.

Clip the plastic strips back into the door frame to hide the screws.

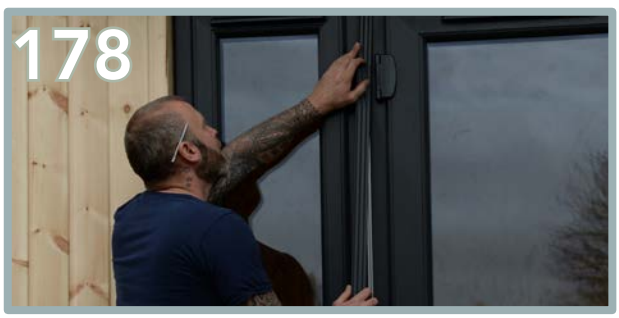
Remove the beading once again around the door, ready to insert the pane.

The glass should be packed using the toe and heel process. Toe and heeling works by supporting the double glazed unit with the packers.

Apply silicone and stick the packers at diagonal opposing corners. Place the pane into position, ensuring it is centralised and packed correctly, holding the pane square.

As the pane is positioned, the beading can be installed using a nylon mallet and tapped securely back into place.

Repeat the same process for the other door and window panes, ensuring it is centralised and packed properly with the toe and heel process. Then add the window handle inside.



For the adjoining frames, attach the strip provided with the metal capping. This will clip into the fixed metal capping. To further secure, you can also add glue to the strip.

Repeat the same process for the internal strip.

Apply expanding foam around the outer edge of the window frame.

Repeat the application of the expanding foam around the front window and door frame.

The expanding foam will be tack free in about 20 minutes. It can be cut back after twelve hours and will be fully cured in 12 -24 hours.

Need some extra help with the window and door sections? Access our ‘how to’ video on our website at forestgarden.co.uk

Remove all excess expanding foam around the window and door frames. Preferably it is better to wait for the expanding foam to cure before removing for easier removal.

If any of the boards are slightly oversized, you will need to measure out your required length. Start with the top board.

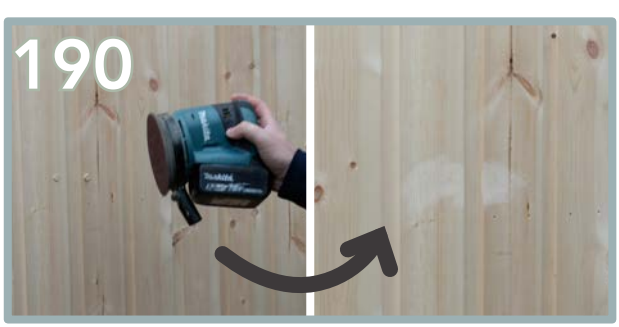
Then cut to the desired size.

Using 6 x 30mm nails, secure the top board into the lintel. Repeat the same process for trimming the sides.

Secure into place with 5 x 30mm nails. Repeat the process for the opposite side of the door frame. Then repeat the same application around the window frame.

You will need to fill in the holes of each screw in the T&G panels to create a flat finish. Further countersink the screws, and enlarge the hole by 10mm.

In your fixing box, there will be wood plugs. Insert one at a time, snap off and hammer further into the hole.



Finish with slightly cutting down and/or just sanding off any excess showing to produce a seamless finish. Repeat this process for every screw hole on the T&G panels.

Position the top plastic ‘L’ strip across the door. Pre-drill the face underneath and fix first.

Using the pins provided with the trims, apply 2 in each corner and 1 x pin in the middle.

Pre-drill across the top and repeat the same process. Use 5 x pins across the front of the plastic trim.

The side plastic trims for the door and window sizes will need to be trimmed down further to fit. Mark out your required length and cut.

Use 5 x pins on the front down the side strip. Repeat the same process for the opposite side.

The same process applies for the window frame. Pre-drill and use 2 x pins on the front edge and 3 x pins underneath.

Pre-drill and use 5 x pins on the front of the side plastic trim. Repeat for the opposite side.

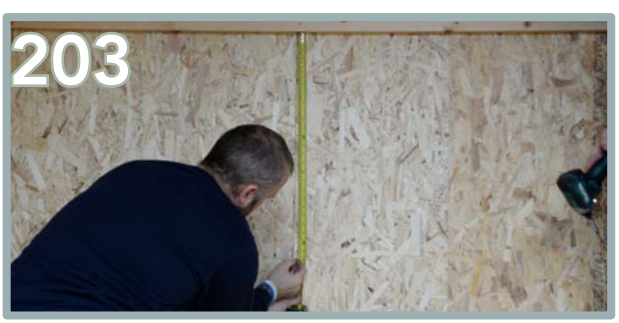
Add strips to each of the corners. The two on the back corners will be shorter. Trim to length if necessary and use 4 x pins.

Begin at the back and position the 45 x 28mm batten flush to the top. This will be the correct length to fit in the space end to end. Use 5 x 80mm screws along the batten.

Repeat the process with the batten being flush to the bottom and end to end. Use 5 x 80mm screws along the batten at equal spaces.

Measure and mark out even spaces to position the two middle battens.

Use 5 x 80mm screws to secure equally across the batten in place.



Repeat the same process to measure and mark out the position for the final back batten.

Using 5 x 80mm screws to secure in place.

Apply one batten above the door opening, flush to the edge opening. Apply the top batten flush to the top. Use 5 x 80mm screws per batten.

Using the 45x28x1960mm battens, apply one on each side of the door opening with 4 x 80mm screws. Then apply another two, with one in each corner, with 4 x 80mm screws.

Then apply a batten in between the other two. Use 4 x 80mm screws and repeat on the opposite side of the door.

On the left hand side, apply the 45x28mm battens in between the front and back battens. These will flush end to end. Position each batten at the same height as the back.

Use 5 x 80mm screws for each batten. The battens on the left hand side will not be aligned to the front batten positions.

Repeat the same process for the two top battens and frame the window. Apply the 45x28x1960mm battens, one on either side using 4 x 80mm for each.

Apply the three shorter 45x28mm battens in between the window and back. These will be flush end to end and ensure they are the same height as the positioned back panels.

Use 4 x 80mm screws for each of the three smaller battens. You will apply the roof battens on after the beaded wall panels have been installed.

Start at the back left hand corner. Ensure the rounded edge of the panel is up against the wall. Use 4 x 50mm screws on each side and 2 x 50mm screws in the centre.

Butt up the next back panel with the rounded edge up against the chamfered edge and screw into place. There will be a trimmed board that will fit into the space. Use 8 x 50mm screws.

Move onto the front beaded boards. There will be two 'L' shaped pieces on either side of the door. Use 10 x 50mm screws to secure. Use 6 x 50mm screws on the top half and 4 x 50mm screws on the bottom half. Use 6 x 50mm screws for the lintel board in the middle.

On the side panels, work from the front to the back. Ensure the window board is flush to the window edges. Then apply the next side piece. This is already trimmed for the provided space.

Use 10 x 50mm screws for the window panel and the trimmed side panel. Repeat the same process on the opposite side. Both of these will be the same sizes to fit into place.

Use 4 x 50mm screws on each side and 2 x 50mm screws in the centre for both panels.

Apply the 45x45mm roof battens. Start at the back. Ensure it is flush end to end and against the back beaded panels. Secure with 5 x 80mm screws. Repeat the same process as the front.

Measure and mark out equal spacing for the two central battens. Position the first batten and secure with 5 x 80mm screws.

Repeat the process for the last roof batten.

Mark out a guide line underneath all the battens at both ends. This will help when applying the roof panels and ensuring that you drill into the battens behind.

Start from the left side. Ensure the rounded edge is butted up against the side panels. You will need at least one person to hold the panel up whilst the other screws it into place.

Use 4 x 50mm screws on each side and 2 x 50mm screws in the centre for both panels.

Repeat the same process. Ensure the rounded edge is butted up against the chamfered edge on the first panel.

Use 4 x 50mm screws on each side and 2 x 50mm screws in the centre for both panels.

Apply the final and trimmed beaded panel. Use 8 x 50mm screws to secure.

The final result is shown above.

Start to apply the internal framing for the door. This is the same process as the external framing application. Start at the top, ensuring the board is flush to the edge.

Nail into place using 6 x 30mm nails.

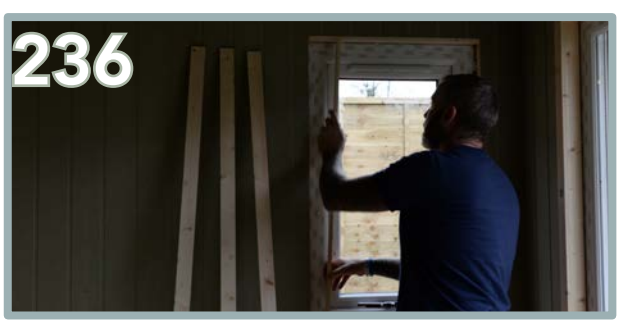
Apply the internal sides on either side of the door. Trim to fit if necessary. Use 5 x 60mm nails for each board to secure.

Apply the 45mm boards on top of beaded panel. Ensure this is flush to the inner framing. Use 5 x 30mm nails to secure. Repeat this process on the opposite side.

The top frame will sit on top of the side boards. Ensure both ends are flush to the side framing edge. Trim if necessary.

Fix into place using 6 x 30mm nails.

Repeat the same process for the window framing. Use 4 x 30mm nails to secure.



Apply the side framing, using 5 x 30mm nails per board.

Apply the overlapping framing. Ensure flush around all edges and trim if necessary.

Use 5 x 30mm nails per side 45mm board. Finish with the top board using 4 x 30mm nails to secure.

Apply the small trims at the front and back first. Ensure the trims are flush end to end and they are in contact with the roof as much as possible. Use 5 x 30mm nails.

Apply the roof trims on each side, in between the front and back. Ensure these are flush end to end and follow the angle of the roof from front to back.

Use 5 x 30mm nails for the roof trims on each side. The final result from the back.

The above picture shows the final result of the windows and door.

You will be provided a silicone seal for the windows and doors. The colour provided will match your windows and doors.

Start at the top and trail down to the ledge at the bottom. Keep the amount of silicone consistent as you trail down.

Repeat the same process on the opposite side.

Finish with trailing across the top. Repeat the same process around the window frame.

After your Xtend Garden Building has been assembled you will need to apply a preservative. Please refer to the Xtend Garden Building Aftercare Information.

Xtend Garden Building *Aftercare*

After your Xtend garden building has been built there are a number of actions that need to be completed to ensure it is rot proof, weatherproof and water tight. Carrying out these steps will ensure your Xtend garden building is durable and long lasting.

Below provides details on the following tasks and the best way to accomplish these tasks.

1. Treating your Xtend garden building against rot.
2. Applying a weatherproofing finish to the Xtend garden building.
3. Interior finishes and electrics.

1. Protecting Against Rot

Your Xtend garden building comes in an untreated form, (except for the bearers which do come wrapped in DPC as they are in direct contact with the ground); therefore the correct treatment application for your building is required as soon as possible, ideally straightaway once your Xtend garden building is built.

For the exterior treatment we recommend the use of a solvent based preservative such as Barrattine Preserver as it is slower drying than water based alternatives, ensuring better penetration of the surface layers of the timber.

Start the treatment process by **applying a minimum of two coats** of preservative to the exterior of your garden building. **Ensure you treat the ends of the T&G panels** to prevent any moisture being soaked up. Preservative contains substances that will prevent the build up of fungi, mildew, and wood boring insects. Some of these fungi are potentially very harmful to your Xtend garden building, causing it to rot.

The interior floor, walls and roof can be treated with a suitable interior treatment later, once the Xtend garden building has been built. Additionally you can provide laminate flooring once treatment has been completed.

2. Weatherproofing Your Garden Room

Your Xtend garden building needs to be protected from moisture, and to a lesser extent, the sun's UV rays.

Timber will constantly try to reach a moisture content equilibrium with its surrounding environment causing the cells of the wood to continually expand and contract. In addition, any untreated timber exposed to rain, or water in general, can expand rapidly. This constant movement leads to issues such as twisting, warping, splitting, bowing, cupping, and many more potential problems. In fact the largest percentage of timber related issues are directly linked to movement.

UV rays from the sun break down lignin in the surface cells of timber causing it to go a grey colour, this doesn't harm the timber in any way but it does look unsightly. A good quality exterior timber finish must be applied to the exterior of your garden room which offers protection from the extremes of our climate throughout the UK.

The 2 most common types of high quality exterior wood finish are penetrating finish and film finish.

Penetrating finishes are predominantly oil or wax based and they work by soaking into the surface layers of timber to provide a tough, durable, weather resistant finish. These finishes are extremely thin in viscosity in order to penetrate the microscopic pores of timber. The more coats applied the further the finish penetrates the timber and the better the protection against UV rays, due to the build up of pigment (colour).

Penetrating finishes are extremely easy to apply and maintain. When the finished surface starts to look tired and worn, it is simply a case of re-applying a fresh coat. No need to sand, strip back or remove the old finish. Penetrating finishes are very forgiving for patch repairs meaning that localised areas of wear are very easy to repair and blend in with the surrounding areas.

Film finishes provide a protective film layer upon the surface of the timber and each coat applied increases the thickness of the film layer. The resins are polymer based and are usually Alkyds or Acrylic, which bond together during the drying process to form the film. These types of finishes are constructed in such a way that the top coat will start to deteriorate with the coat losing its colour and sheen when maintenance is required.

Preparation is fundamental before applying a film finish. A primer coat has to be applied to provide a key for the film finish to adhere to. Without a primer coat film finishes have a tendency to crack during timber movement. This leaves the exposed timber vulnerable and as more water gets under the film it can then peel leaving the timber further exposed. In the event of cracking and peeling the entire finish has to be removed using a heat gun and scraper.

More recently a third finish type has entered the market and is increasing in popularity. This is a penetrating/film finish hybrid. It offers all the advantages of both types of finish and provides superior timber protection. It doesn't crack or peel and is easy to apply and maintain.

A suitable exterior timber finish must be applied to the exterior of your Xtend garden building in order to validate your guarantee. Always read and follow manufacturer's usage and application guidelines. We recommend the following exterior finishes:

- Sikkens Cetol HLS Plus
- Restol Wood Oil
- Timmersol ETS Double Protectant
- Osmo Country Colour
- Osmo Natural Oil Woodstain


E.g. Osmo Natural Oil Woodtstain

These finishes have been proven to stabilize the movement of timber associated with garden rooms. The majority of issues which arise are a direct result of an inferior finish being applied to the garden room. As such, in the rare event of a problem, you will be asked to **provide photographic evidence of your receipt** of purchase for any of the products listed above.

It is fine to treat the exterior walls and interior of your Xtend garden building once it has been built. You do not need to worry about treating the underside of your floor panels. These are already pre-covered in tar (which you would have noticed during your build with the black surface facing down) as they are also in direct contact with the ground. The roof will be covered in a EPDM rubber material which will not split or crack in the different weather conditions and will keep your Xtend garden building roof completely waterproof all year round.

Exterior treatment of the underside of the floor panels will protect your building from rising damp and prevent damp from penetrating the panels. On the roof it will impede the moisture exchange process within the roof panels which are at risk from swelling and lifting, particularly in conditions where humidity levels are high.

A suitable interior timber finish can be applied to the interior untreated battens and the window and door framing of your Xtend garden building. Always read and follow manufacturer's usage and application guidelines. We recommend the following interior finishes:

- **Osmo Polyx®-Oil Original**
- **Osmo Uviwax® UV-Protection**

Do not use a solvent based cleaner when cleaning the plastic on the window and door frames.

3. Interior Finishes and Electrics

Once you have completed the exterior treatment, you can begin to create the interior to suit you and your working environment. We have created a continuous beaded profile to produce an overall aesthetic detail internally. On your walls and roof, you will be left with an olive green colour with an OSB floor and a timber roof trim to finish. It is completely up to you in which order you choose to apply your internal finishes and which materials you intend to use. Our recommendations are listed below as a guide:

Electrics

Before starting any of your decorating, we recommend that you sort out any lighting and electrics that you will be using once using your Xtend garden building. We have supplied screws when applying your beaded panels. This allows ease of access to any wall or roof lighting that you will need to possibly fix, adjust or change in the future. The 45 x 45mm battens provided for your roof allow you have the space for recessed down lights if you would prefer. Although the roof trims are nailed into place, there will be extra nails supplied in case you need to remove the panels to access any electrics and re-apply the roof trims. **Always use a fully certified electrician to attend to any electrics you plan to have for your Xtend garden building**

Laminate / Wood Flooring

A simple underlayment of foam sheeting or breathable membrane is usually sufficient as a base for laminate flooring. In in the unlikely event that the floor surface has any damage or unevenness that has occurred during the build, you will need to lay down a rigid underlayment of thin plywood before applying the membrane and laminate flooring. Providing underlayment for laminate flooring is essential for provided stability, support, additional insulation and produce an overall sturdy floor. For wood flooring, use a spirit level to ensure that your subfloor is flat and level. If it is not then you will need to either line your subfloor with plywood (for a wooden subfloor), or use a self-levelling compound (for a concrete subfloor). Install your wooden flooring in the correct position, using any floor instructions you have been provided. When you are fitting any type of wooden flooring, you must leave an expansion gap at least 10mm around the edge of the room.

Floor Trim

The type and size of floor trim around the floor is entirely up to you. You can purchase any simple floor trims from many DIY stores, such as B&Q, Wickes and Screwfix. When applying your floor trim, ensure to that the ends are at 45-degree angles to meet up at each corner. This can be easily produced with a mitre saw or simply a hand saw. Fix the trims around your edges with a construction adhesive, such as Unibond, No Nonsense or Polyurethane Wood Glue. These can be found in the same DIY stores along with your floor trim of choice.

Decorators Caulk

As part of your final preparation, it is essential to use a flexible filler to fill the gaps and cracks which occur around the door and window frames, on floor trims/skirting boards and the roof and wall panels to provide a tough seal. Apply the filler, preferably with a gun for ease of use and to allow quick drying prior to painting. Decorating caulk can be painted over to enable a smooth and perfect finish. Purchase any brand of your choice from your local DIY store and ensure you can paint over the caulk to allow an easier application when you begin your painting.

Painting

The beaded panels provided are already primed, so you won't need to add any treatments prior to painting the walls and roof. Ensure that you have already filled any gaps and masked off any sections that you don't want paint to fall onto. Additionally, you can add a filler for each of the screw holes and sand down to create a smooth finish. Simply paint the walls and roof to the colour of your choice! Preferably apply the paint with a paint tray and roller for a smoother application and to reduce any brush strokes to the panels. **Always read and follow manufacturer's usage and application guidelines.**

Your Choice of Interior Floor & Walls

Your Choice of Layout

Your Choice of Recessed Down Lights

Xtend Garden Building *Components List*

Check you have all of your parts - Use your checklist to ensure you have all the required building components. Use the part code should you need to order one.

The components provided will be heavy. Please lift with caution and with a **minimum of 2 people.**

3.0x2.5M Xtend Garden Building (Xtend3.0)			
Part Code	**Description**	**Qty**	**Checklist**
	Base Kit		
70452418	Floor Bearer (Wrapped in DPC) 70x45x2418mm	4	
SIPS325FL1	Floor Panel 1266x2418mm (B)	2	
SIPS325FL2	Floor Panel 440x2418mm (C)	1	
75462880	Floor Panel Caps, Front & Back Floor/Wall Plates 75x46x2880mm (AO)	6	
OSB2880120911	OSB Floor Sheet 2880x1209x11mm (AF)	2	
DPCM12.0	Damp Proof Course Membrane 12Sq Metre (Applied to base)	1	
75462224	Side Floor/Wall Plates 75x46x2224mm (AK)	4	
SIPS325SP1	Side Panel 1027x2109mm (G)	2	
SIPS325SP2	Side Panel 1220x2109mm (H)	2	
SIPS325SP3	Side Panel 440x2109mm (I)	1	
SIPS325SP4	Side Panel 1197x2109mm (J)	1	
SJS2017	SIPS Joining Spline 92x2017mm (Q)	4	
SIPSWP	Window Panel 296x2109mm (N)	1	
SIPSWP1	Window Panel End 296x2109mm (N1)	1	
SIPSWINTIN	Window Insert 697x108mm (AA)	1	
SIPS325FRP	Front Panel 435x2190mm (O)	2	
SIPS325LINTEL	Lintel Insert 2286x230mm (S)	1	
97812272AI2	Angled Firring 97x81x2272mm (AB)	2	
SIPS325RF1	Roof Panel 1220x2800mm (V)	2	
SIPS325RF2	Roof Panel 532x2800mm (W)	1	
100462880	Roof Panel Cap 100x46x2880mm (AR)	2	
DPM8.0	Damp Proof Membrane 8Sq Metre (Applied to finished shell)	1	
	T&G Panels & External Components		
SIPS325TGSP1	T&G Side Panel 1468x2332mm (AX)	1	
SIPS325TGSP2	T&G Side Panel 1482x2332mm (AZ)	1	
SIPS325TGSP3	T&G Side Panel 1252x2381mm (BA)	1	
SIPS325TGSP4	T&G Side Panel 1266x2332mm (BB)	2	
SIPS325TGWP	T&G Window Panel 1252x2381mm (BC)	1	
SIPS325TGFP	T&G Front Panel 463x2298mm (AU)	2	
SIPS325TGLINTEL	T&G Lintel 230x2010mm (AW)	1	
SIPS325TGKICK	T&G Kick Plate 108x2010mm (AV)	1	
SIPS325TGCAN	T&G Canopy 340x1440mm (AT)	2	
325FASCIA2968	Fascia 170x44x2968mm	1	
25FASCIA343	Angled Fascias 170x44x343mm	2	
SIPS325ROOFKIT	EPDM Rubber Roofing, Glue & Plastic Roof Trims	1	
45451482PPT	Back Roof Batten 45x45x1482mm (Guttering)	2	
44441252RFP	Side Front Angled Roof Batten 44x44x1252mm	2	
50441250RFP	Side Back Angled Roof Batten 50x44x1250mm	2	
50122010P	Strip - Door Framing 50x12x2010mm	1	
50120605P	Strip - Window Framing 50x12x605mm	1	
50121948P	Strip - Door & Window Framing 50x12x1948mm	4	
SIPS325TRIM	Grey Angled L-Plastic Trims for Corners, Door & Window Frames (Including Poly Pins)	1	
	MDF Beaded Panels & Internal Components		
45282686P	Internal Back/Front Battens 45x28x2686mm	6	
45282168P	Internal Side Battens 45x28x2168mm	6	
45281960P	Internal Vertical Battens 45x28x1960mm	9	
45281250P	Internal Side Battens (Window Side) 45x28x1250mm	3	
BMDFBKP1	Beaded MDF Back Panel 1220x2110mm	2	
325BMDFBKP2	Beaded MDF Back Panel Trimmed 190x2110mm	1	
325BMDFFP1	Beaded MDF Front Panel Trimmed (LH) 705x2190mm	1	
325BMDFFP2	Beaded MDF Front Panel Trimmed (RH) 705x2190mm	1	
BMDFLINP	Beaded MDF Lintel Panel 1220x230mm	1	
BMDFWINSP1	Beaded MDF Window Panel 1220x2138mm	1	
BMDFSP2	Beaded MDF Side Panel Trimmed (Both Sides) 930x2110mm	2	
BMDFSP3	Beaded MDF Side Panel (Plain Side) 1220x2138mm	1	
45452612P	Internal Roof Battens 45x45x2612mm	4	
BMDFRFP1	Beaded MDF Roof Panel 1220x2151mm	2	
325BMDFRFP2	Beaded MDF Roof Panel Trimmed 172x2151mm	1	
45122010P	Internal Strip - Door Framing 45x12x2010mm	1	
45120605P	Internal Strip - Window Framing 45x12x605mm	1	
45121948P	Internal Strip - Door & Window Side Framing 45x12x1948mm	8	
45122076P	Internal Strip - Door Framing 45x12x2076mm	1	
45120671P	Internal Strip - Window Framing 45x12x671mm	1	
25122612P	Interior Finishing Roof Trim - Front & Back 25x12x2612mm	2	
25122128P	Interior Finishing Roof Trim - Sides 25x12x2128mm	2	