



8m X 5m Garden Room – Professional Quality Build Instructions – FREE VERSION



26ft x 16ft Professional Standard Garden Room Build Guide

Exact external dimensions:

- External walls – 7770mm X 4464mm
- External roof – 8086mm X 4923mm

Exact internal dimension:

- Internal – 7452mm X 4141mm

Site Preparation and Planning

Ensure you have measured your site and have ample space to build your garden room. Allow for the roof overhang. This building measures 7770mm by 4464mm from wall to wall and 8056mm by 4893mm at the roof. The overall height is 2500mm.

The overall height, including the base and roof, remains within permitted development rules. Planning permission is not required when building level with the ground. Ensure you fully understand all permitted planning laws before starting your build. [Read more about planning permission here.](#) (UK)

Access to all sides is highly recommended for construction and maintenance purposes. Leave a 50cm gap around all sides of the building.

Ground Works

Levelling the ground before construction is strongly advised. If you are building your garden room on a slope, suitable piles must be used. Some excavation may be required to ensure the overall height of this building does not exceed 2.5m (Assuming you are not applying for planning permission and your building is within 2m of a boundary).

Foundations

Suitable foundations are required for a building of this size and weight. There are many different approaches to this.

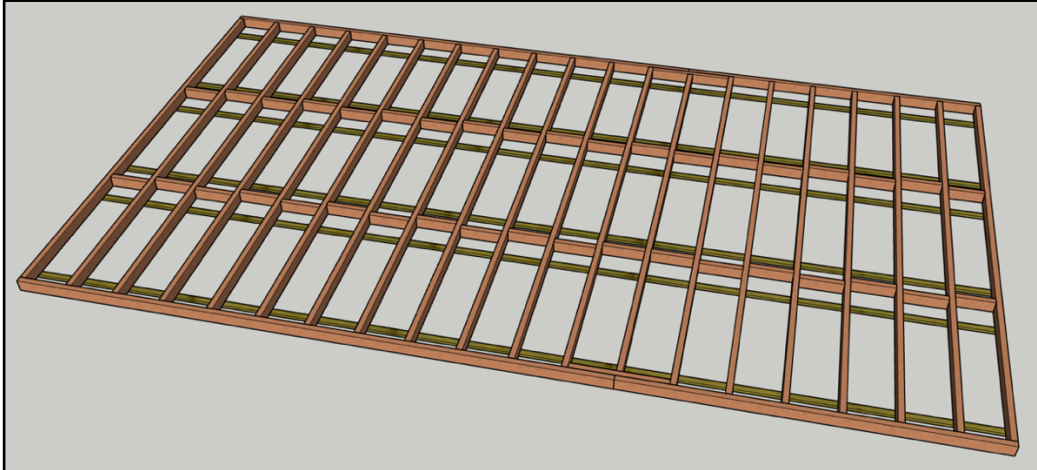
Foundation Options: <https://wood-create.com/how-to-build-an-insulated-garden-room-resource-page/#groundworks>

You will need to decide which foundation approach is best for your specific site and landscape. Whichever foundation you choose, ensure you have weed protection and suitable drainage.

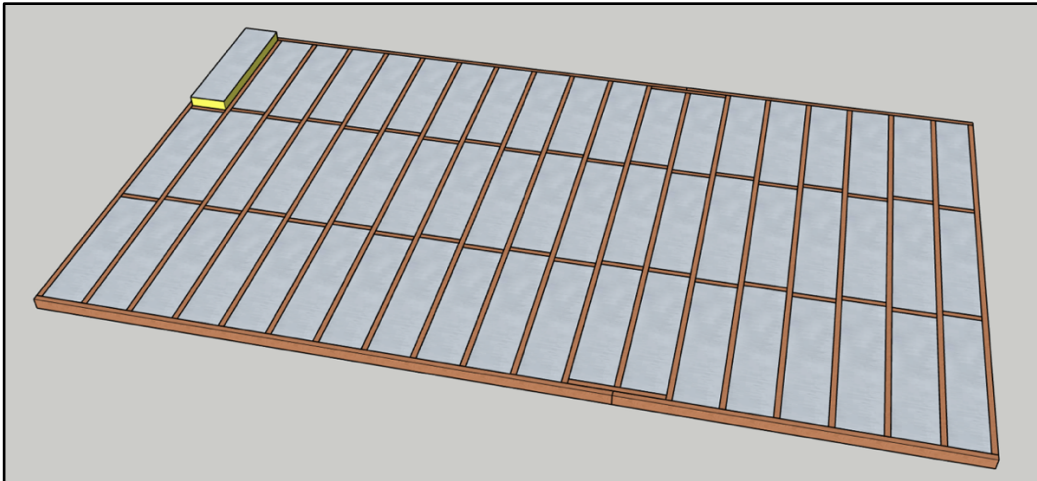
Step 1. Timber Frame Base

The timber frame base is constructed using 100x47mm C16 Construction Timber.

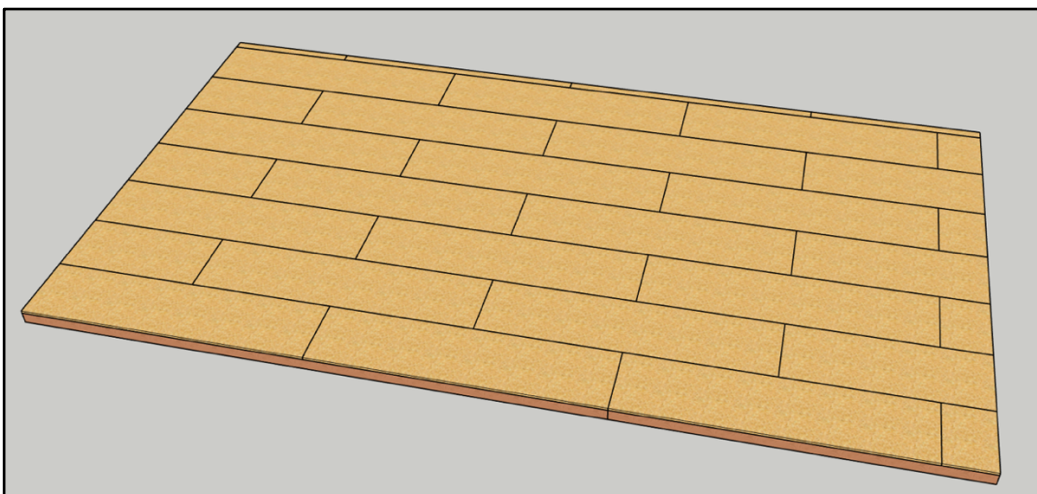
Timber Base Frame with Insulation Supports



Base Frame with 100mm Celotex Insulation



Secure Egger Protect P5 Floor Boards



Timber Frame Base Materials List

Material	Quantity
Caberfix D4 Adhesive 1l	1
Treated timber batten 25mm x 50mm (4.2m)	10
Treated timber C16 47x100mm (4.2m)	25
Treated timber C16 47x100mm (4.8m)	2
Celotex 100mm GA4100 2.4m x 1.2m (insulation)	10
22mm Egger Protect P5 Tongue & Groove Chipboard Flooring TG4E 2400mm x 600mm	26
100mm screws (5mm)	40
80mm screws (5mm)	152
50mm screws (4mm)	300
Breather membrane (1.5x25m)	1

Timber Frame Base Cut List

Timber	Cut	Quantity
Treated timber 47x100mm (4.8m)	4800mm (No cut)	2
Treated timber 47x100mm (4.2m)	4200mm (No cut)	19
Treated timber 47x100mm (4.2m)	4106mm	1
Treated timber 47x100mm	753mm	2
Treated timber 47x100mm	353mm	36
Treated timber 47x100mm	306mm	1
Treated timber batten 25x50mm (4.2m)	4200mm (No cut)	6
Treated timber batten 25x50mm (4.2m)	3400mm	6

Note – Always check the length of your timbers to ensure 'no cut' is accurate as some of the timbers may differ in size. Not all suppliers will provide an exact length.

Instructions

Refer to the diagrams above to complete the following:

1. Construct the base, starting with the outer frame. Use 100mm (5mm) screws to secure the pieces together. Use two screws per joint. Drill 3.5mm pilot holes before inserting screws.
2. Square off the frame by measuring equal lengths diagonally from corner to corner. Adjust until equal.
3. Measure 400mm centres for the inner frame. Secure the 4.2m timbers at each end using 80mm (5mm) screws.
4. The shorter noggins can be secured in place with 80mm screws. These can be staggered as per the picture to make fixing easier.
5. Secure the roofing battens to the underside of the frame using 50mm screws. If you cannot access from underneath, insert screws through the timber frame at an angle. (These will secure the insulation into the frame so that they sit flush with the floor).
6. Cut and push the 100mm insulation (Celotex or Kingspan) in between the frame. Use a 20" panel saw to cut the insulation. It should be cut to the exact size of each space, leaving no gaps. Use off-cuts to fit where needed.

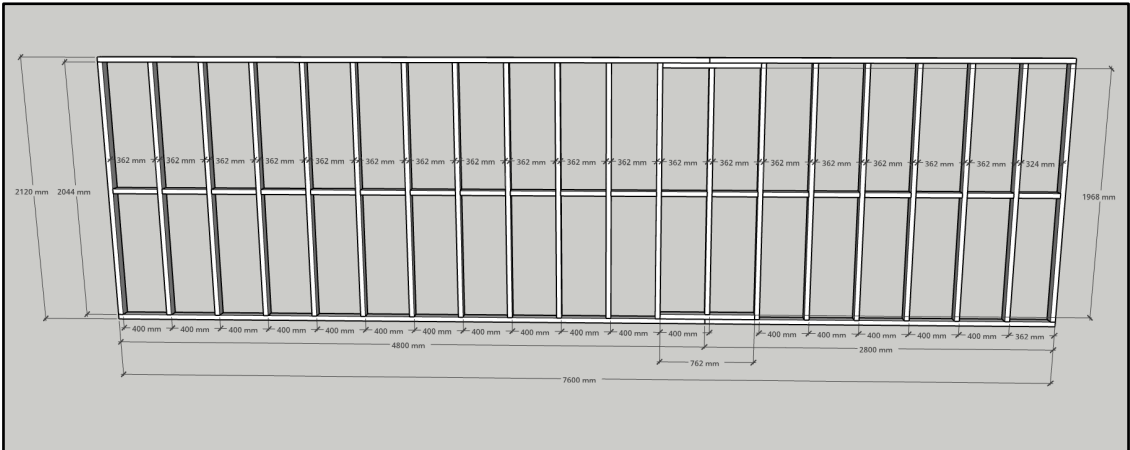
- 7. Lay a breathable membrane over the whole surface. This should overlap the sides.
- 8. Lay and secure the Egger Protect boards over the top. Start from one corner and work your way along the front edge of the base. Work your way around and cut boards to fit flush with the base frame. Run a bead of glue (Caberfix D4 Adhesive) down each edge before joining the boards together.

This completes the base.

Step 2. Constructing the Walls

Rear Wall

To complete the rear wall, we first construct the frame.

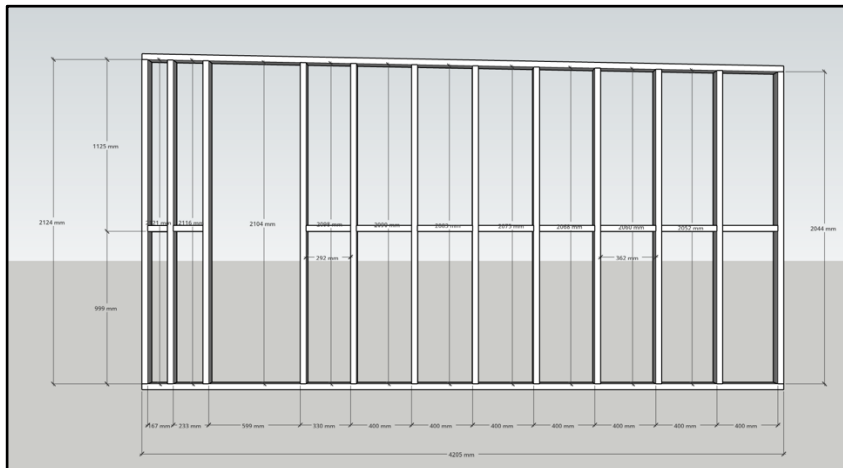


Rear Wall Materials List

Material	Quantity
CLS treated timber 38x89mm (4.8m)	
CLS treated timber 38x89mm (3.6m)	
CLS treated timber 38x89mm (2.4m)	
80mm x 5mm wood screws	

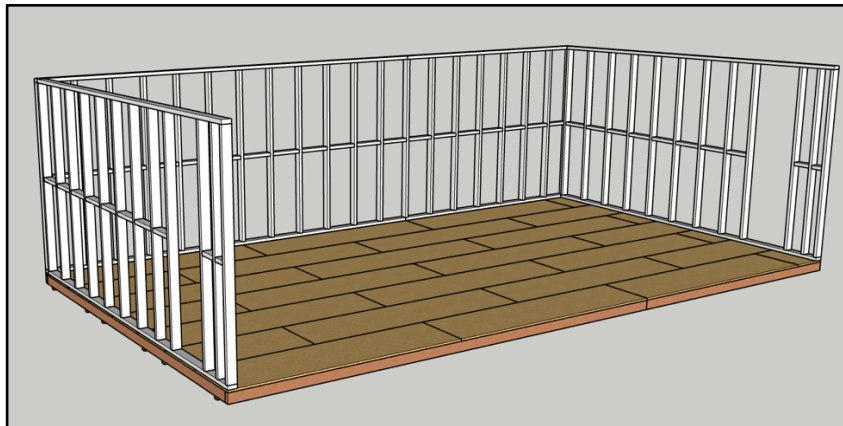
Cut List
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Side Walls (x2)

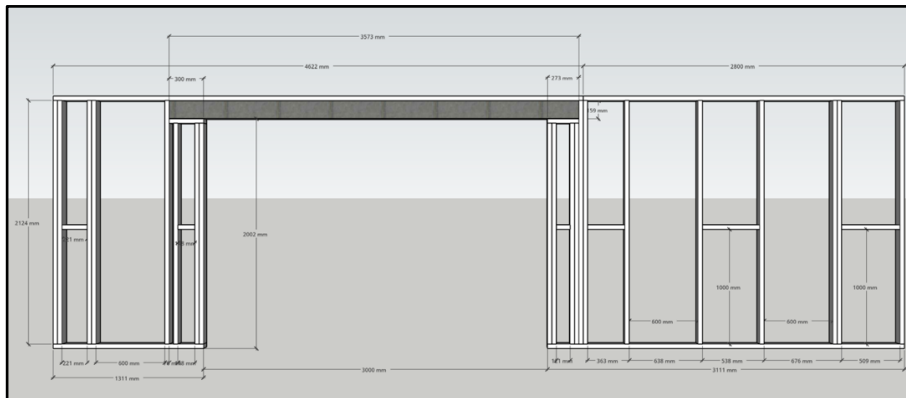


Side Walls Material List (for both side walls)

Material	Quantity
CLS treated timber 38x89mm (4.2m)	
CLS treated timber 38x89mm (2.4m)	
80mm x 5mm wood screws	



Front Wall



Front Wall Materials List

Material	Quantity
CLS treated timber 38x89mm (4.8m)	
CLS treated timber 38x89mm (2.4m)	
80mm x 5mm wood screws	
Steel box hollow 160x80mm (5mm thick) Grade: S355J2H (Length: 3573mm)	
60mm x 4mm wood screws	
55mm x 4mm Tek screws	
9mm OSB board	
Rockwool insulation (see instructions)	

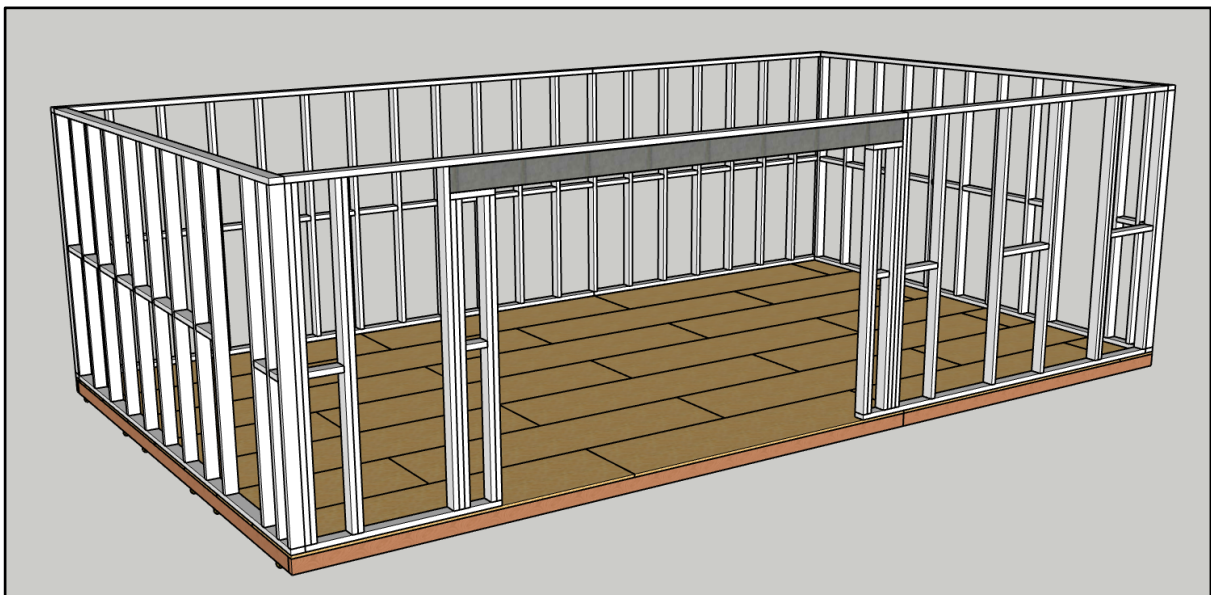
Front Wall Cut List

Timber	Cut	Quantity
CLS treated timber 38x89mm (4.8m)		
CLS treated timber 38x89mm (4.8m)		

Instructions

1. Cut each piece to length.
2. Drill countersunk pilot holes and secure all the pieces with 80mm screws. There should be 2 screws for each joint. The frame can be constructed lying down and then lifted into place.
3. Pocket holes... **Paid version only**
4. Secure the front wall... **Paid version only**
5. Fill the steel box hollow... **Paid version only**
6. The steel box... **Paid version only**
7. Cut and secure the 9mm... **Paid version only**

IMPORTANT: Please ensure... **Paid version only**

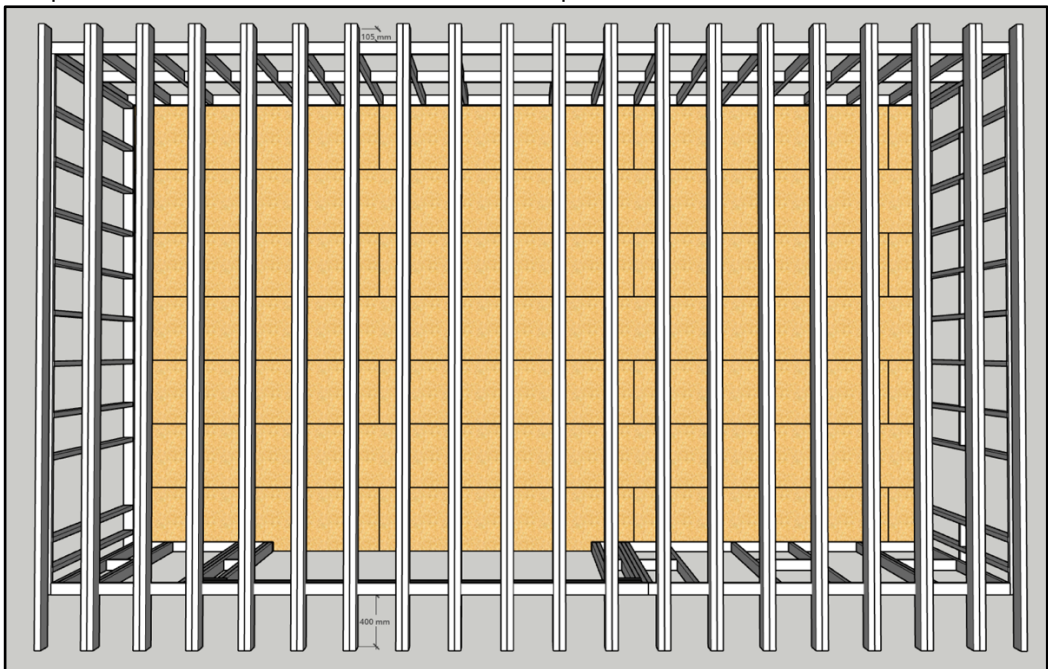


Step 3. Roof Construction

With each wall secured in place...

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Step 1. Rafters lifted and secured into place



Step 2. Roof framing and noggins completed

Step 3. Roofing boards

Roof Frame Materials List

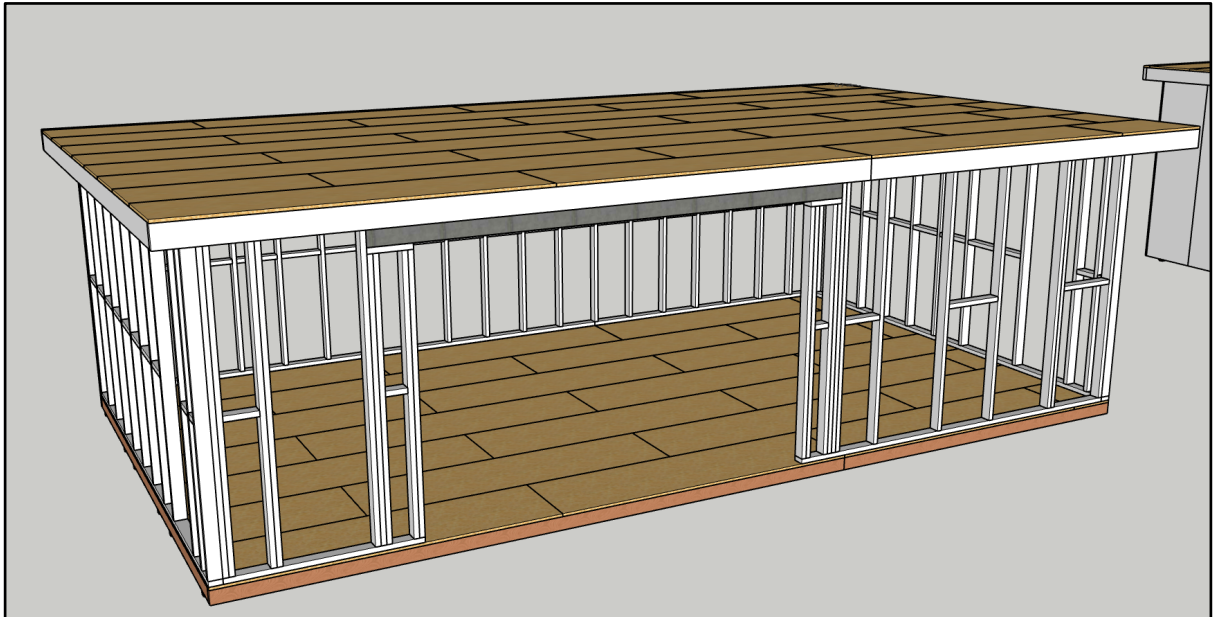
Material	Quantity
Treated timber 47x150mm (4.8m)	
80mm screws (5mm)	
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Roof Frame Cut List

Timber	Cut	Quantity
Treated timber 47x150mm (4.8m)	Paid version only	

Instructions

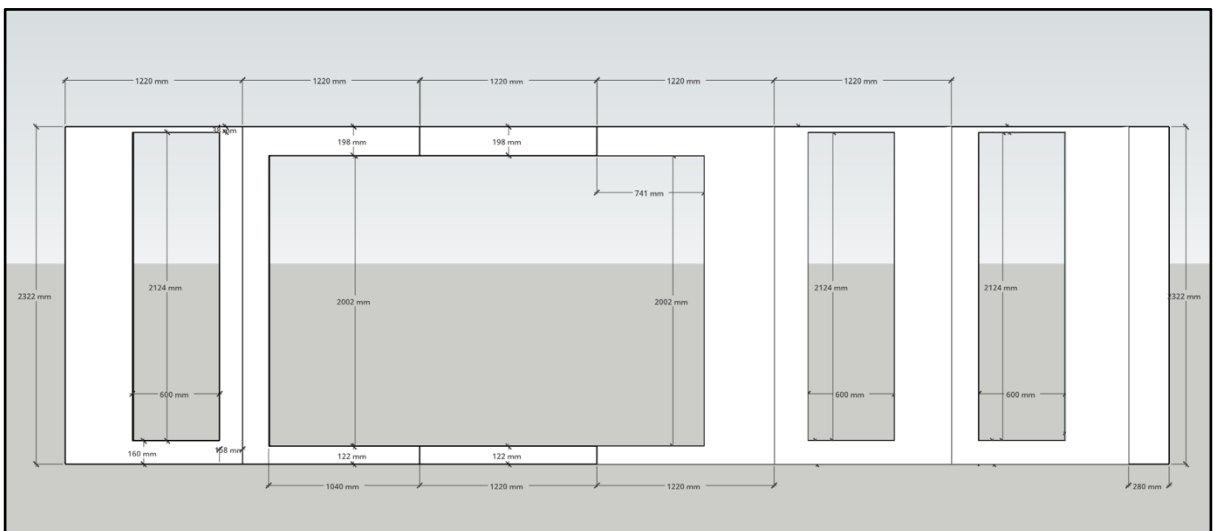
1. Start by joining 18 pairs of 4.8m long 150x47mm C16 timbers. Nail or screw each one together using 80mm screws or nails. Apply in sets of two at six equal intervals along the timber. Drill 10mm holes at five equally spaced intervals and insert a 100mm x 10mm bolt and nut.
2. Paid version only
3. Paid version only
4. Paid version only



Step 4. Adding OSB3 Boards to the Wall frames

The OSB3 (18mm) boards can now be cut and secured to the timber frame using...

Front Wall OSB



Left Wall OSB
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Right Walls OSB
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Rear Wall OSB
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Wall Boarding Materials List

Material	Quantity
OSB3 board 2440x1220 (18mm)	20
Screws 50mm (4mm)	320

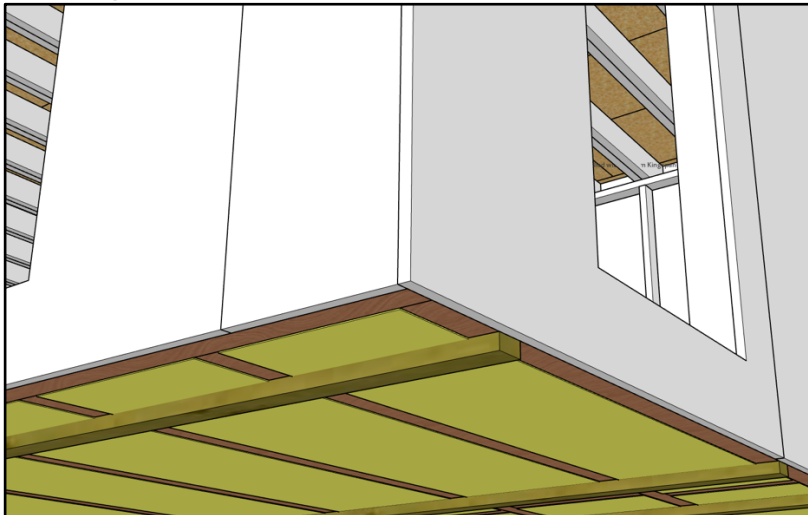
Wall Boarding Cut List

Material	Cut	Quantity
OSB3 board 2440x1220 (18mm)	Refer to above diagrams	

Instructions

1. Cut the OSB3 boards to size. I'd recommend using a circular saw and jigsaw for this job.
2. Secure each piece to the.... Paid version only

Front right corner



Front left corner
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Left side view, rear
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Right side view, rear
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Step 5. Installing the Breather Membrane

The next task is to cover all the wall...

Breather Membrane Materials List

Material	Quantity
Breather membrane	
Staples for gun...	

Instructions

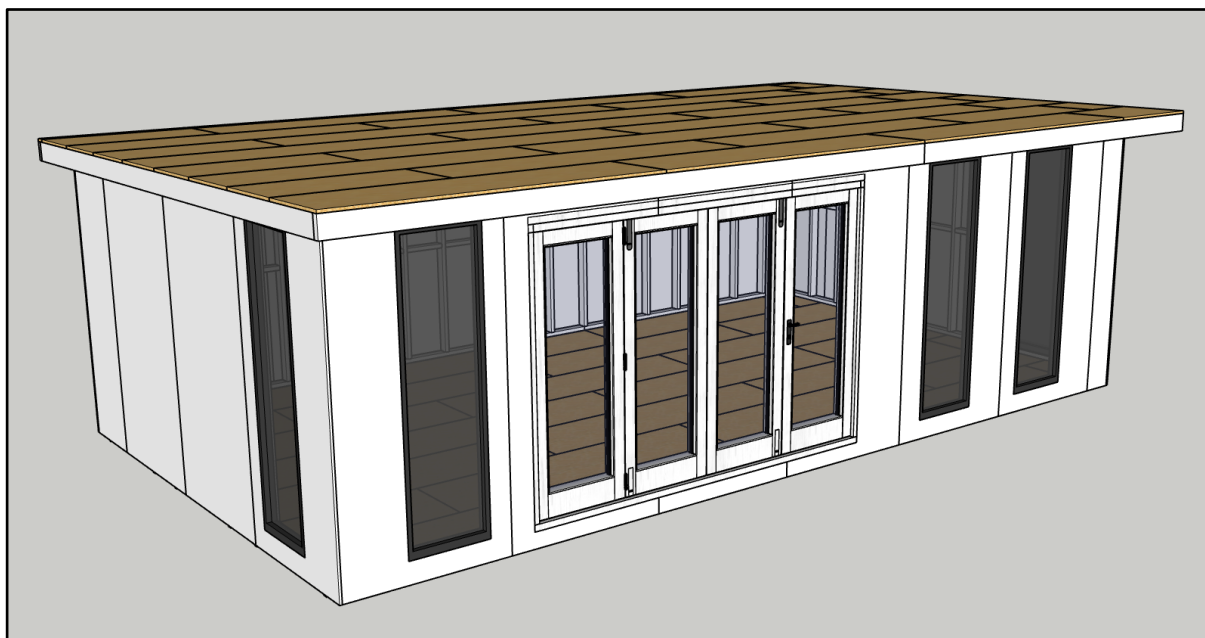
1. Start with the lower half of the building and wrap the membrane around it. Add a couple of staples every 50cm or so to hold in place.
2. Repeat for the top half with a good overlap.
3. There is no need to go over the windows and doors. 25m should be enough to cover the building. (excluding the openings.)

Breather membrane Example

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Step 6. Installing the Windows and Doors

This stage requires some insight into the specific installation instructions for the products you have chosen for your garden room. All manufacturers will provide these with their products.



Step 7. Electrics and Lighting

Now is the best time to install all your electrical wiring. Consult a qualified electrician... **Paid version only**

Electrical Materials List

Material	Quantity
Grey 1.5mm Twin & earth cable 50m drum	
Grey 2.5mm Twin & earth cable 50m drum	
Armoured cable (size and length dependant on you requirements)	
Consumer Unit (Size dependant on your requirements)	
2.5 & 1.5mm cable clips (100 pack)	
Sockets, light switches, light fixtures, down lights (interior and exterior)	

The wiring can be pulled through drill holes.

Step 8. Cedar Cladding on Roof Overhang

Roof Cladding Materials List

Material	Quantity
Western Red Cedar Cladding 94mm x 17mm	
50mm Galvanised brad nails (18GA)	

Front overhang

...

Rear overhang

...

Step 9. Installing the Furring Strips

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Step 10. Installing the Wall Cladding

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Step 11. Finishing Window, Door Frames and Cornering

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Step 12. Treat and Protect the Cedar Cladding

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Step 13. Roof Facia Boards

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Step 14. EPDM Roofing System

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Step 15. Finishing the Interior

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Roundup

This completes the 8m X 5m deluxe garden room build. Taking the DIY approach will save you roughly 50% of the costs when compared to hiring a garden building specialist. (50% labour)

Use the following full materials list to send to suppliers for the best possible quotes. You may need to approach separate specialist suppliers for the western red cedar cladding, roofing materials and the windows and doors.

A build of this nature will take a team of 3 roughly 10-15 days to complete. Building this on your own is completely achievable. Allow yourself 20-25 days.

Tools List

Other than your basic tools like hammer, panel saw, utility knife, etc. Here is a list of tools required to complete this garden room to a high standard, ensuring fixings are completed quickly and efficiently. This list is based on my own personal preference and can be adapted to a brand of your choice. I've also provided a 'quick link' to where you can find each product.

Tool	Quick Link
Dewalt 18V LXT Cordless Brushless Impact Driver DCF887N & Combi Drill DCD796N Twin pack	Amazon
Dewalt DCS391N XR 165mm Circular Saw 18V	Amazon
Dewalt DCS355N 18V Oscillating Brushless Multitool	Amazon
Dewalt DCN680N Brushless XR 18GA Brad Nail Gun 18V	Amazon
Dewalt DCS334N Cordless Jigsaw XR 18V	Amazon
Evolution Compound Mitre Saw R255SMS+	Amazon
16" Grafter Spade	Amazon

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Insulation			Paid version only
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Roofing			Paid version only
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			Paid version only
EPDM Roofing			Paid version only
			Paid version only
			Paid version only
Sure Edge Drip Trim			Paid version only
Sure Edge Kerb Trim			Paid version only
Water Based Deck Adhesive 5 Litres			Paid version only
Contact Adhesive 1.0 Litre			Paid version only
Cedar Cladding			
Western Red Cedar Cladding 94mm x 17mm			Paid version only
Western Red Cedar 18 x 144mm Rainscreen ST50 (2.13m)			Paid version only
			Paid version only
			Paid version only
Miscellaneous			
			Paid version only
			Paid version only
			Paid version only
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Fixings			
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Electrical			
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- full 46-page PDF .
- full details on all stages of the build. 15 stages.
- higher-quality images.
- all detailed images and cross-section diagrams.
- 3D interactive models in SketchUp. Zoom in and explore the finer detail on any section of the build.
- email support.
- the full supplier list. Find the cheapest online and local suppliers.
- a complete materials list that can be sent to suppliers for up-to-date costs.

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