

Please note

This pack is designed as a guide and follows the build process we use.

Materials have been calculated against size of build and are to the best of my knowledge correct in quantity and size.

I have used the same process I use on all my builds to calculate the materials.

It is your responsibility to confirm size of build as it progresses.

Take all necessary precautions to ensure your safety and the safety of others.

Electricity kills! Consult a qualified person.

Falls from height can kill

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Garden room self-build

6mtr x 3mtr

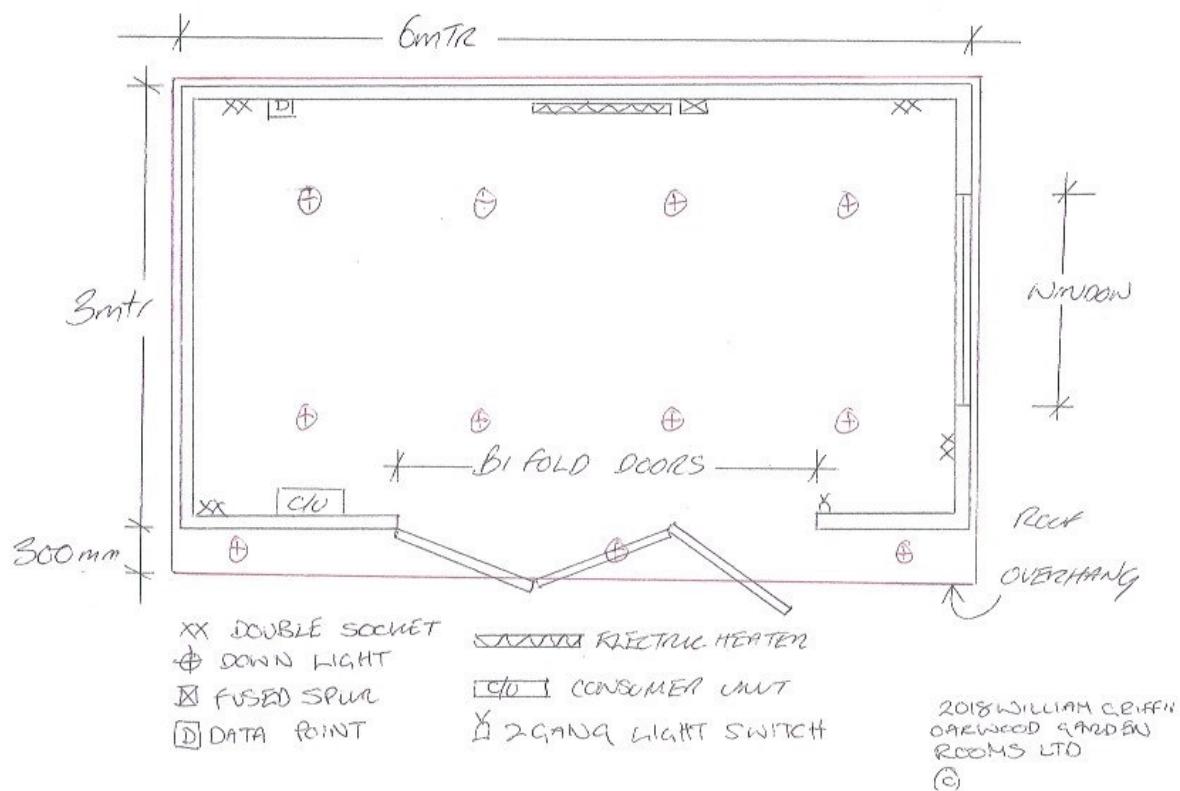
- **Introduction**
- **Floor plan**
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- **Wall construction**
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- **Exterior wall cladding, 1st fix electrics and insulation**
- **Windows doors and cladding**

Additional notes for your build

Please be advised of the following

- I have included 100mm and 60mm screws and 90mm and 50mm Paslode nails. Please omit whichever one you do not require as a means of fixing.
- Keep OSB roofing boards dry at all times, I find it is best to fit boards on a dry day and as soon as the glue to fix them has gone off (30mins) scrape it off then roll rubber roof over. This can be left like this until ready to glue rubber down.
- Use stainless steel pins or nails for fixing cedar as anything else will stain the wood.
- Get your base level and all else will follow correct.
- There are no cutting lists as all your base sizes will vary depending on how accurate you have been when doing the rods.
- Take care at all times
- If in doubt consult a professional.
- Always measure roof before purchasing as your build size may differ to measure, allow 100mm each side to let rubber hang over roof
- All the information herein is to the best of my knowledge and it is your decision how you build your garden room, this pack is the way we build and is a guide only.
- Build method is the one we use, right or wrong. It is only a guide.
- PPE is important, and should be worn at all times.

6mtr x 3mtr floor plan



Garden office materials list

The following list is all available at **Toolstation** and can be ordered online
www.toolstation.com

I generally find that this is the cheapest and best value for money, having said this you may want to buy elsewhere or can source cheaper.

I've included current catalogue numbers for all items but please check as you order in case the numbers have changed.

| ITEM | CAT NUMBER |
|-----------------|-------------------|
| QUANTITY | |

| | | |
|-------------------------|----------------|----|
| Weed barrier | 62380 | 1 |
| Joist hangers | 43424 | 65 |
| Twist nails | 10121 | 5 |
| 100mm screws | 28484 | 10 |
| Breathable membrane | 83455 | 2 |
| 60mm screws | 21467 | 6 |
| Polyurethane glue | 52489 | 3 |
| Paslode 51mm nails | 66137 | 1 |
| Paslode 90mm nails | 89084 | 2 |
| Expanding foam | 57280 | 1 |
| Plasterboard screws | 29607 | 2 |
| Black gutter 3m | 81698 | 3 |
| Gutter bracket | 22015 | 8 |
| Gutter stop end | 41043 | 2 |
| Gutter outlet | 53667 | 1 |
| Gutter joint | 86578 | 2 |
| Fall pipe 2.5m | 23000 | 1 |
| Downpipe clip | 98710 | 2 |
| Offset bend | 52079 | 2 |
| Pipe shoe | 21966 | 1 |
| 1.5mm 6242Y | 45731 | 1 |
| 2.5mm 6242Y | 51466 | 1 |
| Dry lining box 1gang | 76952 | 3 |
| Dry lining box 2gang | 48850 | 4 |
| Metal clad socket | 14332 | 0 |
| Metal clad switch | 86362 | 0 |
| Switched socket | 82496 | 4 |
| Switched spur | 44377 | 1 |
| Light switch 1 gang | 78751 | 0 |
| Light switch 2 gang | 46459 | 1 |
| Consumer unit | 99875 | 1 |
| Cable clip 1.5mm | 12218 | 2 |
| Cable clip 2.5mm | 12288 | 2 |
| Down lights | Styles vary | 11 |
| Instant nails adhesive | 51064 | 2 |
| Silicone for roof trims | 97204 | 2 |
| Heavy duty torx screw | 60332 | 1 |
| Splice plate | 13819 | 1 |
| Moisture barrier | 12869 screwfix | 1 |
| 250mm screws | 66512 | 1 |
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Garden office materials list cont...

The following list is for the timber and sheet materials.

We use Shire timber in Leeds, they are the best available for us but depending on where you live you will need to contact your local timber merchants or builders merchants for supply and delivery.

Always ask for discount as you will normally get it due to it being a large enough order.

| Item | Size | Length | quantity |
|---|------------------|---------|----------|
| Tanalised decking joists | 100mm x50mm | 3.6 | 14 |
| Treated 100 x 75 | 100mm x 75mm | 4.8 | 6 |
| 22mm chipboard flooring (eggar protect) | 600m x 2.4mm | | 15 |
| CLS 4x2 | 38mm x 89mm | 2.4 mtr | 36 |
| CLS 4x2 | 38mm x 89mm | 4.8mtr | 9 |
| OSB 11mm | 1220mm x2440mm | | 13 |
| Treated roof battens | 25mm x 50mm | 4.8mtr | 60 |
| Feather edge board | SEE BELOW | 2.4mtr | 67 |
| 5x2 C16 | 125mm x 50mm | 4.2mtr | 32 |
| OSB 3 Roofing boards | 600mm x 2.4mm | 18mm | 16 |
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Feather edge board can be used to clad elevations that can't be seen, such as against walls or hedges or the rear of your garden room.

It is cheap and comes pre treated.

If you are using feather edge board you will need for your project

67 pieces for the rear

34 pieces for each side

Cedar cladding comes in different widths so you will need to consult your supplier for amounts you require.

Garden office materials list cont....

The following list is for additional materials that can be purchased from B&Q, Selco or any other builders merchants although prices vary for insulation so shop around.

| Item | Size | Length | Quantity |
|--|--|--------|----------|
| 100mm rigid insulation (kingspan or similar) | 1200mm x2400mm | | 12 |
| 50mm rigid insulation | 450mm x 1200mm | | 52 |
| Plaster boards 12.5mm | 1200mm x 2400mm | | 21 |
| Ballast 35kg | We equate 1 mix @ 3:1= 3 holes, holes vary in size so this could go either way | | 24 |
| Cement 25kg | | | 8 |
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The following list is for the rubber roof and fascias and trims. We use **Northern Building Plastics** in Leeds. There is a supplier on the net that provides full kits with a handy on line calculator, www.rubber4roofs.co.uk however we have not used them but there prices are similar to our suppliers.

| Item | Size | Length | Quantity |
|--------------------|-------|--------|----------|
| Rubber roof | 3.9 | 7 | 1 |
| Water based glue | | | 5ltr |
| Gutter trim | | 2.5 | 3 |
| Edge curb trim | | 3.5 | 4 |
| External corners | | | 4 |
| Internal corners | | | 0 |
| Curb trim joint | | | 1 |
| Poly top pins 40mm | | | 1 |
| Poly top pins 60mm | | | 1 |
| 175mm fascia board | 175mm | 5mtr | 4 |
| 100mm sofit board | 100mm | 5mtr | 3 |

| | | | |
|---|-------|------|---|
| Hollow soffit ribbed | 300mm | 5mtr | 2 |
| Fascia corners | | | 4 |
| Fascia joints | | | 2 |
| Soffit 'H' section | | | 1 |
| You must confirm roof size before ordering | | | |
| | | | |

The remaining items are as follows

Steel shoe and hollow steel beam

Mild steel channel 100mm x 50mm. You will need a piece 150mm long for every pile dug for the base. Any steel stockholder will stock this and may drill and cut it for you too. It is also available from matal4u on the internet.

Steel shoes required= **25**

We use a 160mm x 80mm x 5mm hollow steel beam for the door lintel, size to be determined by you.

Based on your door requirements (3mtr doors) you need a steel measuring **3400mm** , size to be confirmed by you.

Threaded zinc plated rod

24mm threaded rod, you will need **one 1mtr long rod for each pile dug** for the base. We use BAPP fixings in Leeds. They are readily available in mtr long rods on the internet or the steel supplier may be able to supply them.

You need the following amount based on your size **25**

You will also need a large metal washer 100m x 100mm x 10mm, **25** required, and 5 nuts per rod,

125 Nuts required.

Cedar cladding

Available from www.silvatimber.co.uk . Cedar cladding is very expensive so it is important to try and find it supplied at the length you want for vertical cladding. The closest you will get is 2.4mtr which will give you very little wastage. We currently use Duffield timber in Ripon www.duffieldtimber.com

If using cedar cladding make sure to buy stainless steel pins as regular pins will corrode and stain the cedar.

Cedar cladding will eventually go grey and loose its rich colour, you can purchase a treatment which will slow down this.

You may choose to clad your garden room in a different finish and a quick internet search on Google images will give you some other ideas for cladding.

SWA

Steel Wired Armour, this cable will run from your house supply to the consumer unit in your garden office. We always use 10mm, as an over precaution (consult an electrician if not sure) the length will be determined by you, but make sure you get a few extra mtrs as you don't want to be short. Suppliers are any electrical wholesalers or internet search.

2KW wall heater

Dont scrimp here as you want a good source of heat in the colder months. Buy one with a timer so you can have the garden room heat up on a morning before you use it. Youll find them on ebay, or

We use a German make available in toolstation cat number 47052 for a 2kw, or 70225 for a 3kw

Lighting

I have included spot lights on the materials list but have not put a catalogue number as they vary in style and price, buy fire rated and use LED bulbs. You may want wall lights or strip lights depending on usage.

Doors and windows

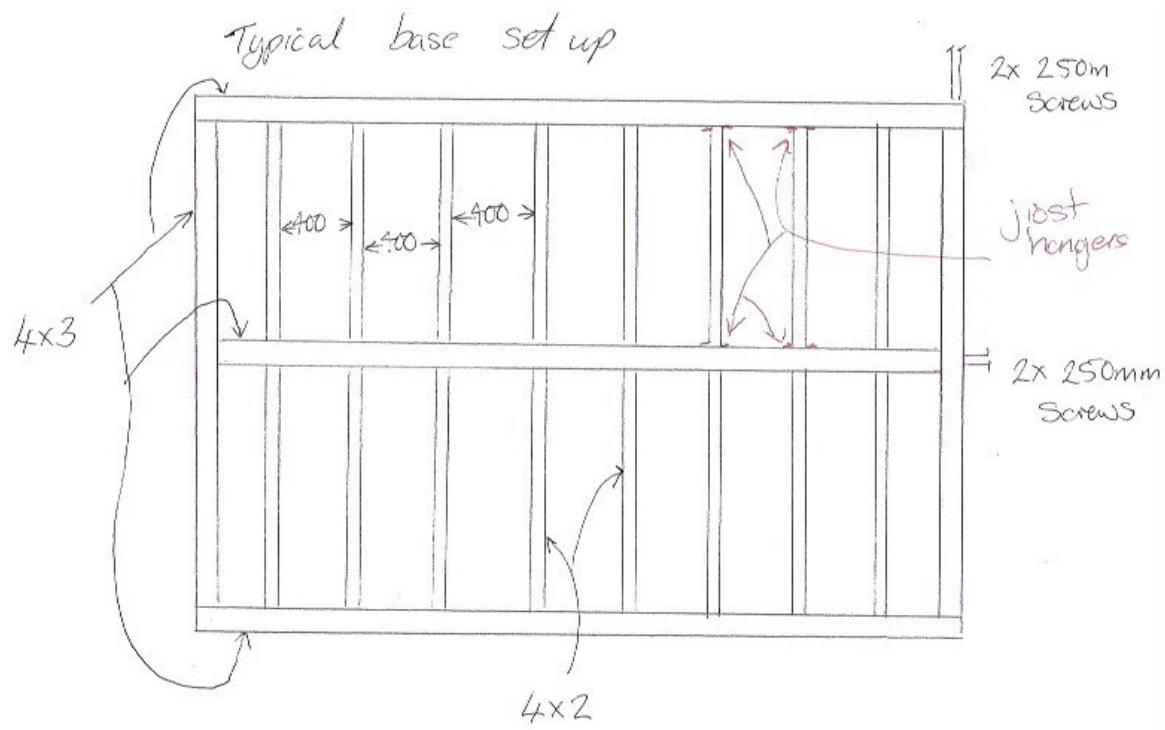
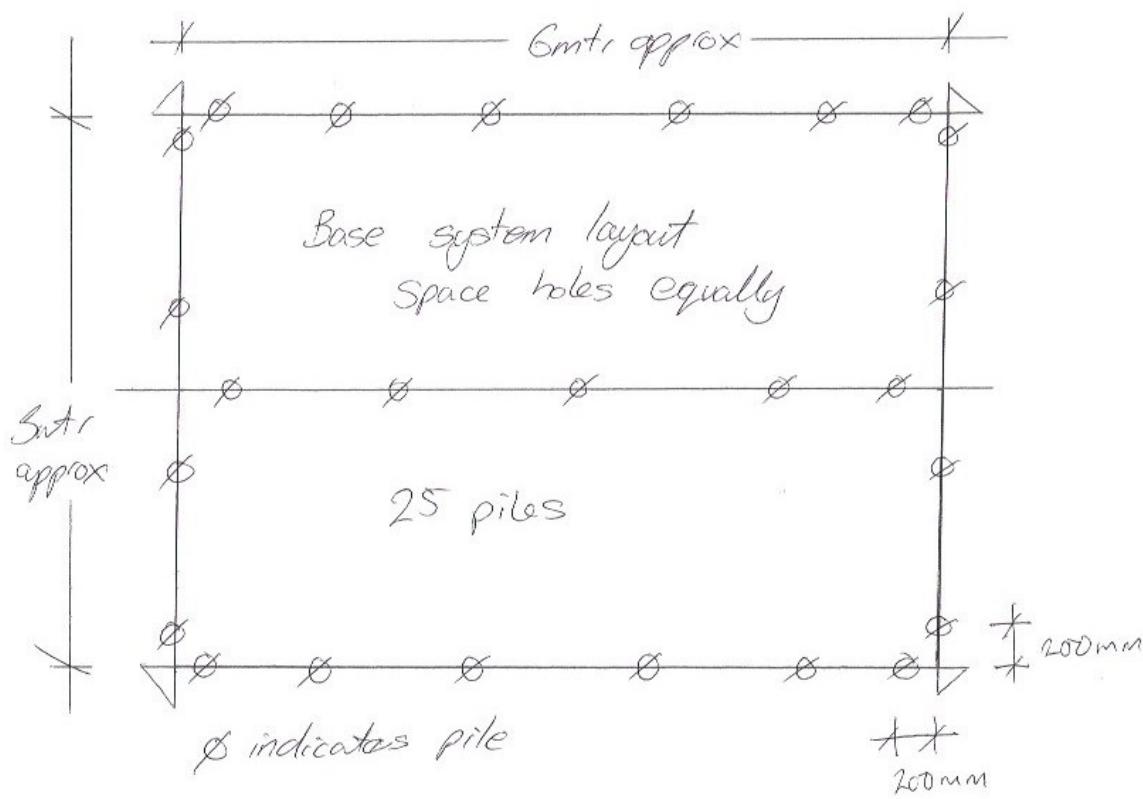
Again styles vary and depending on your budget and preference you will make the final decision on this. Aluminium is the best option but also the most expensive. We currently use **Express bi-folds**, these are market leaders and In my opinion are the best on the market with a good price, shopping around will get you a good discount.

A lot of people like to source second hand units, but bare in mind, the height restrictions of the builds does not allow for standard height doors. All ours finish at 1950mm.

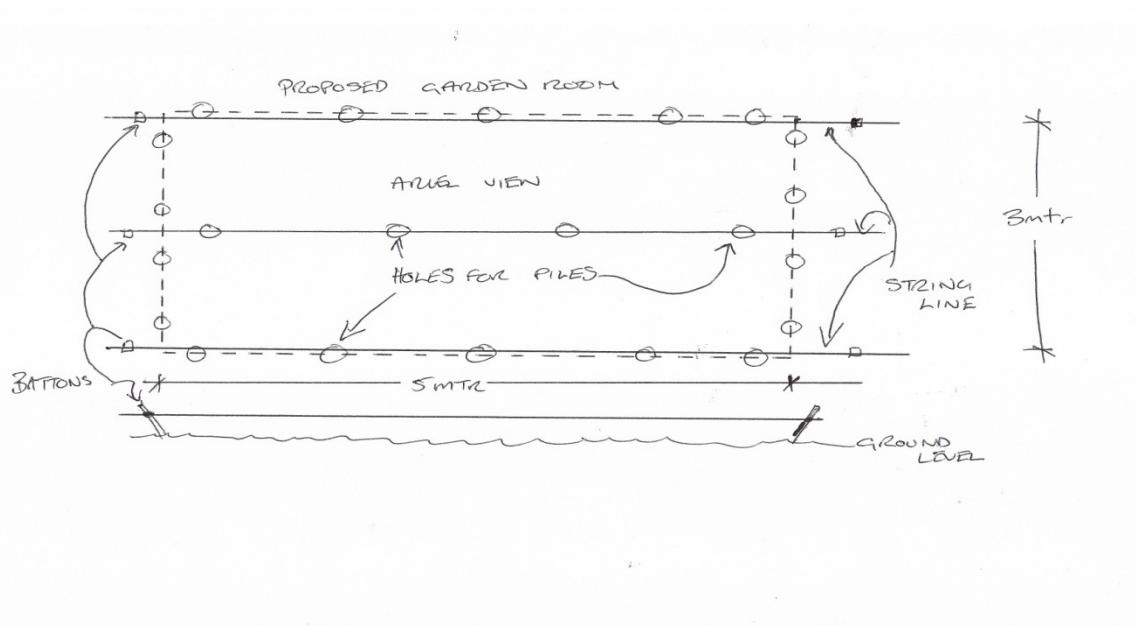
This concludes the materials list and you should have everything you need to build your garden room.

BASE CONSTRUCTION

Please follow the instructions in order and make sure to complete all procedures as directed

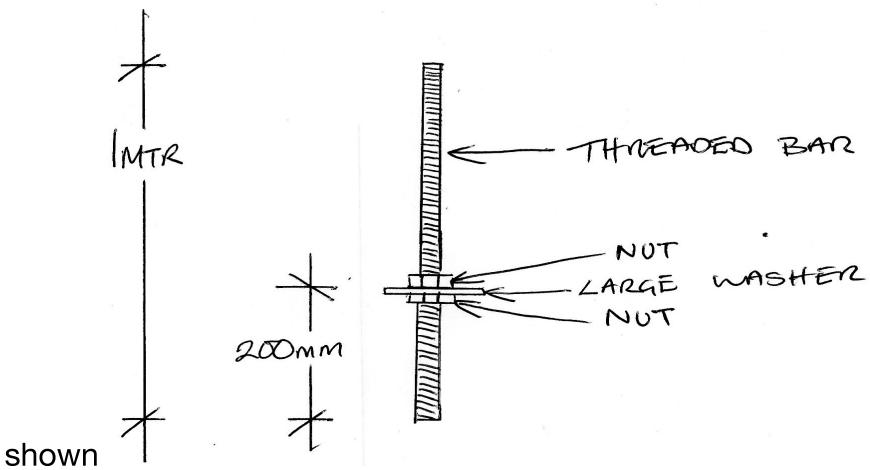


- Once you have decided where your garden room is to be situated you must then clear the area of all vegetation (grass, plants and bushes) and level the ground as much as possible
- Set out the string line using two off cuts of battons , hammer the battons into the ground and pull the line as tight as possible without it snapping

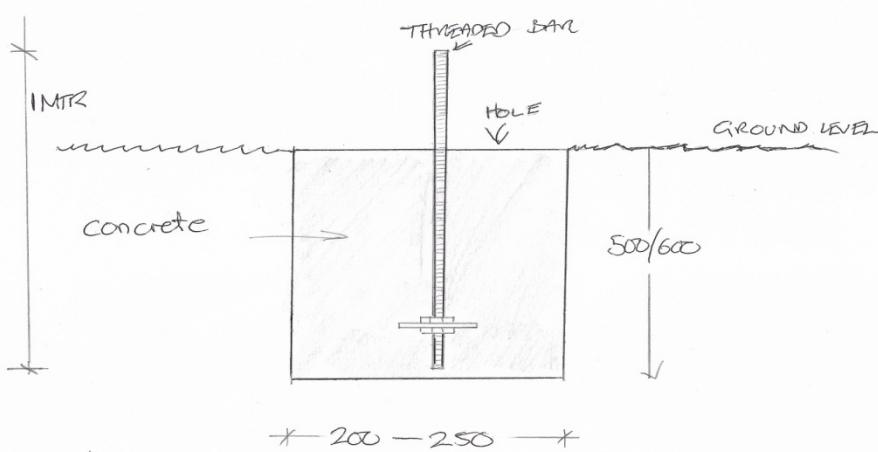


- You need to dig a hole for the piles every 1.2mtrs or as near as possible depending on the size of your garden room
- So along the string line mark out the number of holes required for the back and also along the front string line, and a row in the centre
- Use another button to hold the line out of the way whilst you dig the holes one by one
- Each hole wants to be approx 500/600mm deep and 200/250mm wide
- The centre of the holes must be under the string line
- As an **example** we are going to say the above garden room will be 5mtr long and 3mtr deep, this will mean we have 5 holes at the back and 5 holes at the front, 4 holes down each side and 4 in the centre(these can be further apart than 1.2 as they carry no weight of walls or roof, use above drawing for holes required for your size build)
- Now mix your concrete at a 3-1 ratio of ballast3 and cement1, a stiff mix is best as the threaded bar will need to be straight and not want to fall over

- Prepare the threaded bars as

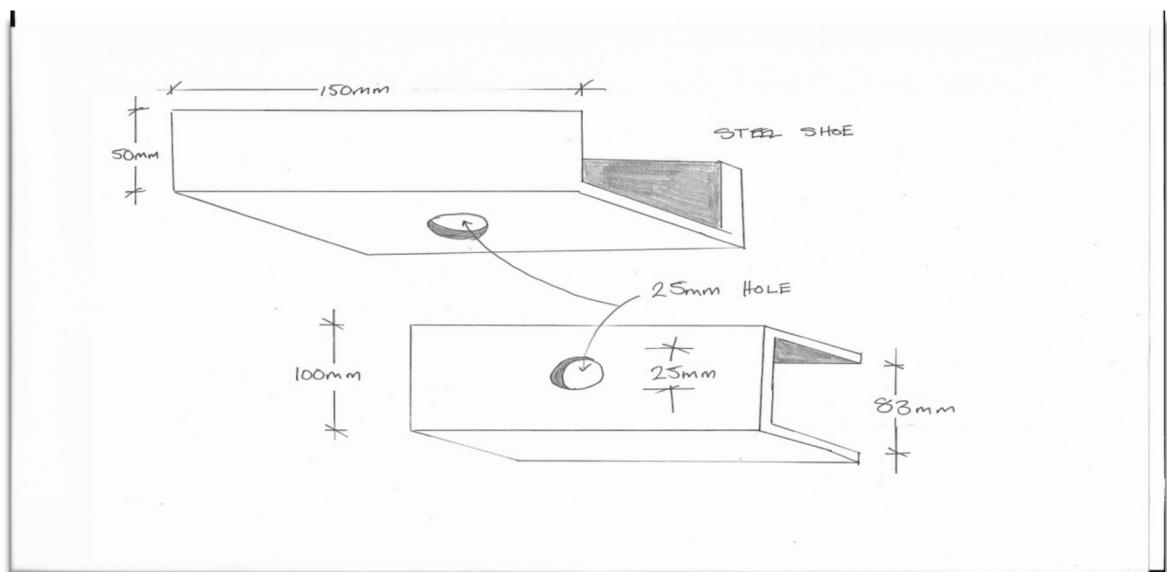


- The nut and washer will stop the bar pushing through the concrete when under downward pressure
- Hold the bar in the hole vertically and next to the string line holding it off a couple of mm, then fill the hole with concrete making sure to tamp it down to compress. When the hole is full make sure the bar is still in line and as vertical as possible

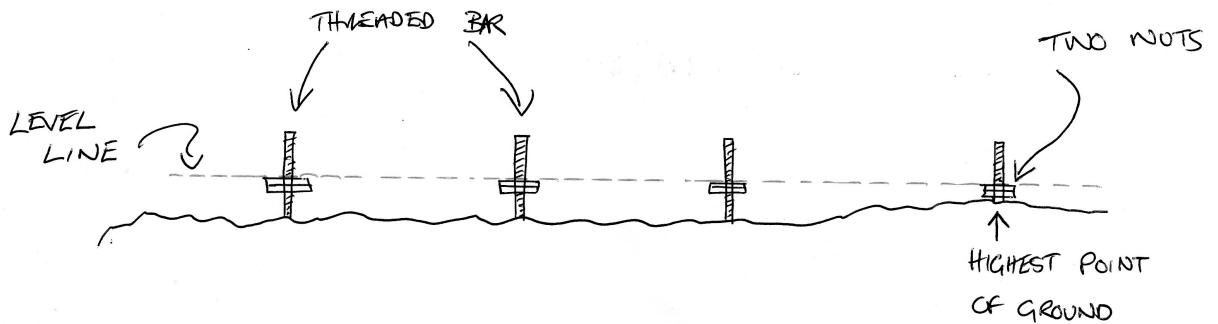


- Do this for all holes and once finished stand at the end of the line and eye through to make sure all bars are in line and straight. Adjust if necessary. WASH OFF ANY CONCRETE ON THE THREADED BAR AS THIS WILL IMPEDE NUTS
- Allow the concrete to go off(24hrs)
- Now remove string line
- You should now have five rows of bars in straight lines

- BE CAREFULL NOT TO FALL ON TO BARS AS THEY MAY CAUSE SERIUOS INJURY
- Lay out the landscape fabric over the complete area and if joining it make sure to overlap 200mm. Use stones or pegs to hold the membrane in place. Cut with knife to allow to fall over bars
- Prepare the steel shoes by both cutting and drilling them yourself or ask the supplier to do this for you. THE HOLE MUST BE DRILLED IN THE CENTRE

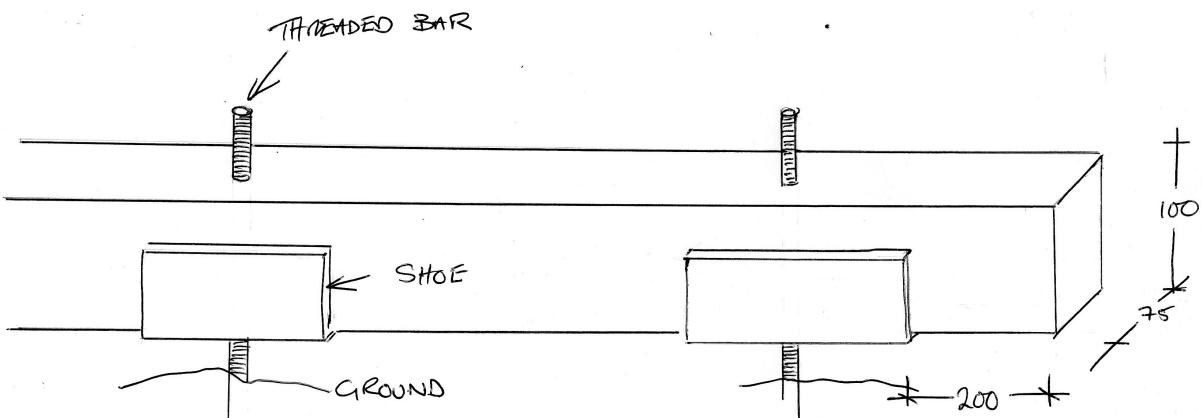


- Once the shoes are prepared find the highest point of ground and this rod position will be where you level from
- Wind two nuts onto the highest rod and wind to just above the ground then level the next rod from here and so on until all the nuts are at the same level, rotate the level from rod to rod to balance out any discrepancies in your level

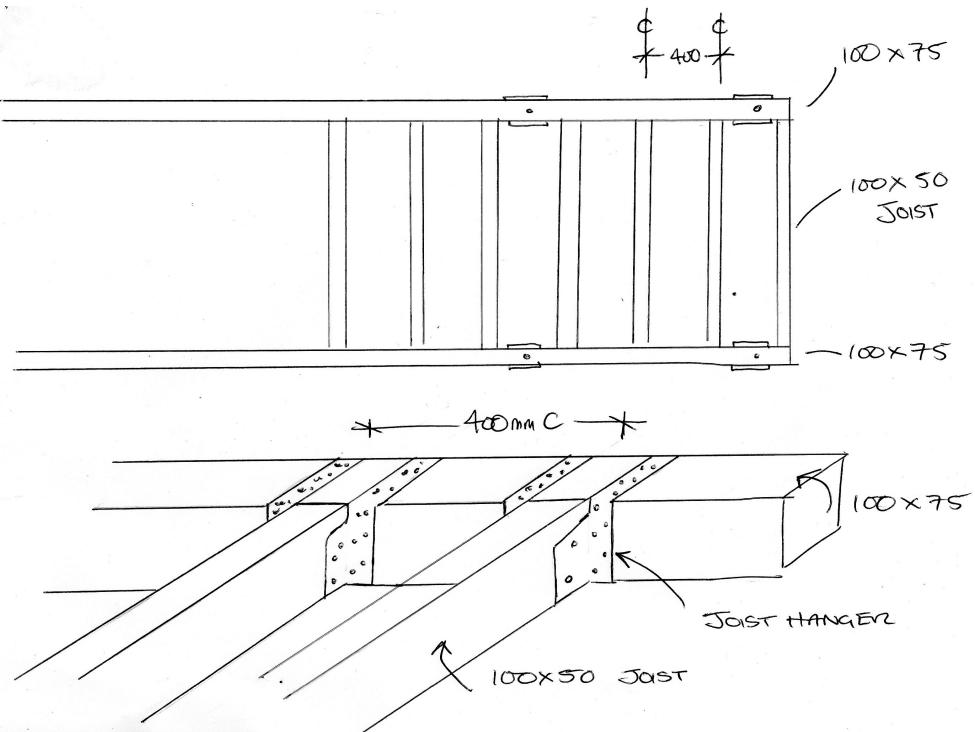


- Once all the nuts are level you can lock off the nuts by turning them against each other. All nuts must be tight
- Get your 100mm x 75mm timber and place next to rods, place a pencil mark on the timber to correspond with the rod and drill 25mm hole through the centre of the timber. Allow the timber to go past the end bars by 200mm, do this for all 5 rows of rods

- You should now have 5 lengths of 100mm x 75mm with holes drilled through that correspond with bars in the ground, notch out the area around the hole so the nut can be fastened down flush with the top of the 100mm x75mm
- Put a shoe on each bar and then drop the 100mm x 75mm down onto the bars and shoes. Start with the front then the back. Once these are on the rods you can drop the sides on. The sides will sit on the top of the front and back timbers, cut the ends to allow the sides to fall level and onto the shoes, repeat for the centre timber
- Check to see if level
- Adjust if necessary



- You should now have 5 x 100mm x 75mm timbers sat level and providing the front, back, both sides and middle main timbers
- Now cut your 100mm x 50mm to provide the joists these need to be at 400 centres and you need to fix them to the 100mm x 75mm with the joist hangers, use the twist nails to fix
- Use a piece of timber cut as a spacer so all joists are the same space apart.
- If a joist falls on a shoe, notch out the end of the joist to allow it to sit over the shoe and fix with 2 x 250mm screws
- Fix all joists with twist nails and nail every hole if possible



- Hammer the joist hanger flat over the top of the 100mm x 75mm and nail
- The top of the 100mm x 75mm must me as flat as possible so the floor lays flat
- You should now have your base frame which should be level and solid.
- Tighten nuts onto the threaded bar and this will now secure frame work to floor
- Cut off remaining threaded bar(ppe should be worn at all times) and hammer flat to avoid cuts from sharp edges

Your base structure is now complete!

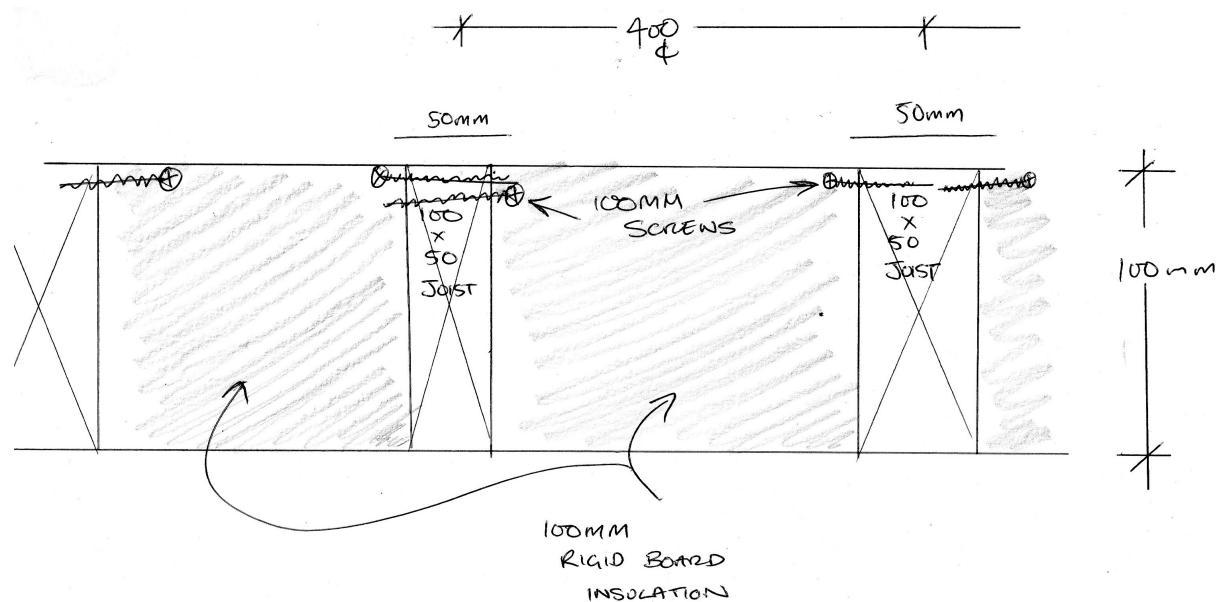
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Floor insulation and covering

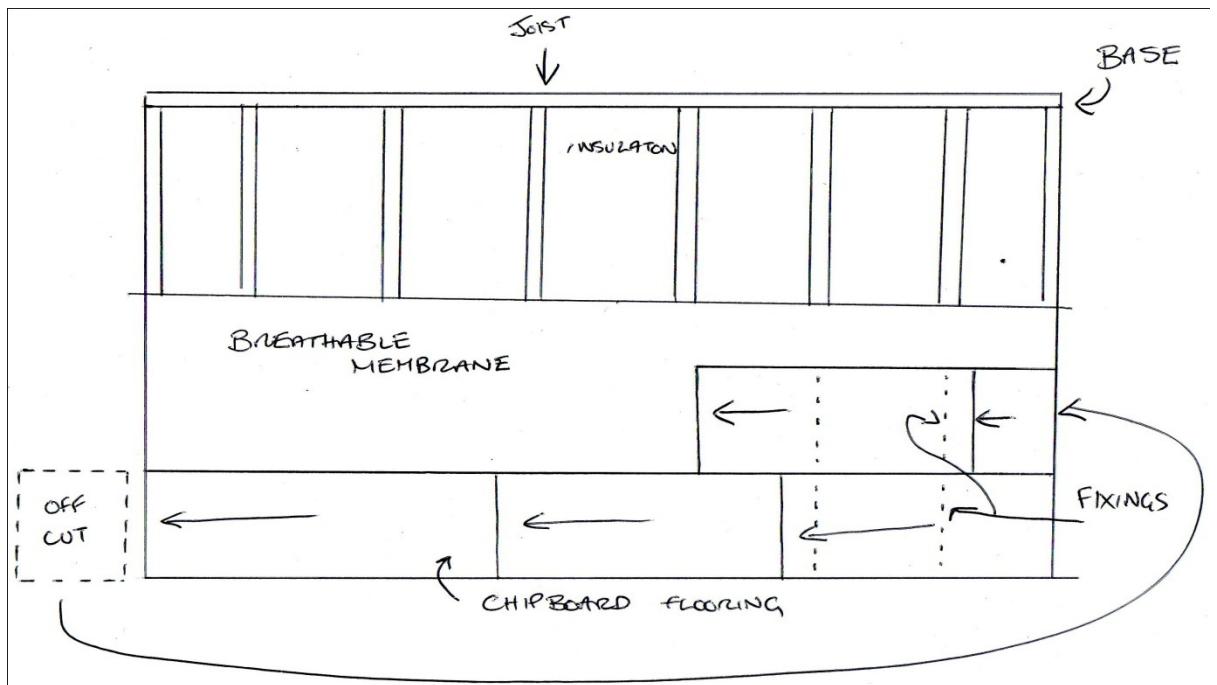
Please follow all instructions in order and make sure to complete all procedures as directed

Now your base frame is built its time to insulate and cover with flooring

- Cut and fit 100mm rigid board insulation in-between the joists
- All gaps must be filled
- Only fill the floor area that is to be used as living space as there is no point insulating a storage area unless needed
- It is a good idea to use a couple of 100mm screws to stop the insulation ever falling down to the ground, we use treated slate battens fixed underneath to support the insulation



- When all the floor is insulated check for any gaps, these can be filled with expanding foam if small. If big, insert some more cuts of rigid board insulation
- Cover the base with breathable membrane. THIS MUST BE PLACED UPSIDE DOWN AND OVERLAPPED BY 100MM. Fix with nails or the wind will blow it off.
- The floor can now be covered with the moisture resistant chipboard flooring, we use 22mm Egger protect. Use polyurethane glue on all joints and put 5 fixings in each row on the joists. Use 60mm screws or 50mm paslode nails
- It is important to get your first row dead straight as this will make all consecutive rows easy to fit. So take a bit of time with the first row and the next ones will be easy
- You do not need the joints to fall on the joists as the floor once glued is designed to be strong enough to carry the span
- Allow the glue to go off and then scrape off with a chisel and sweep and clean the area



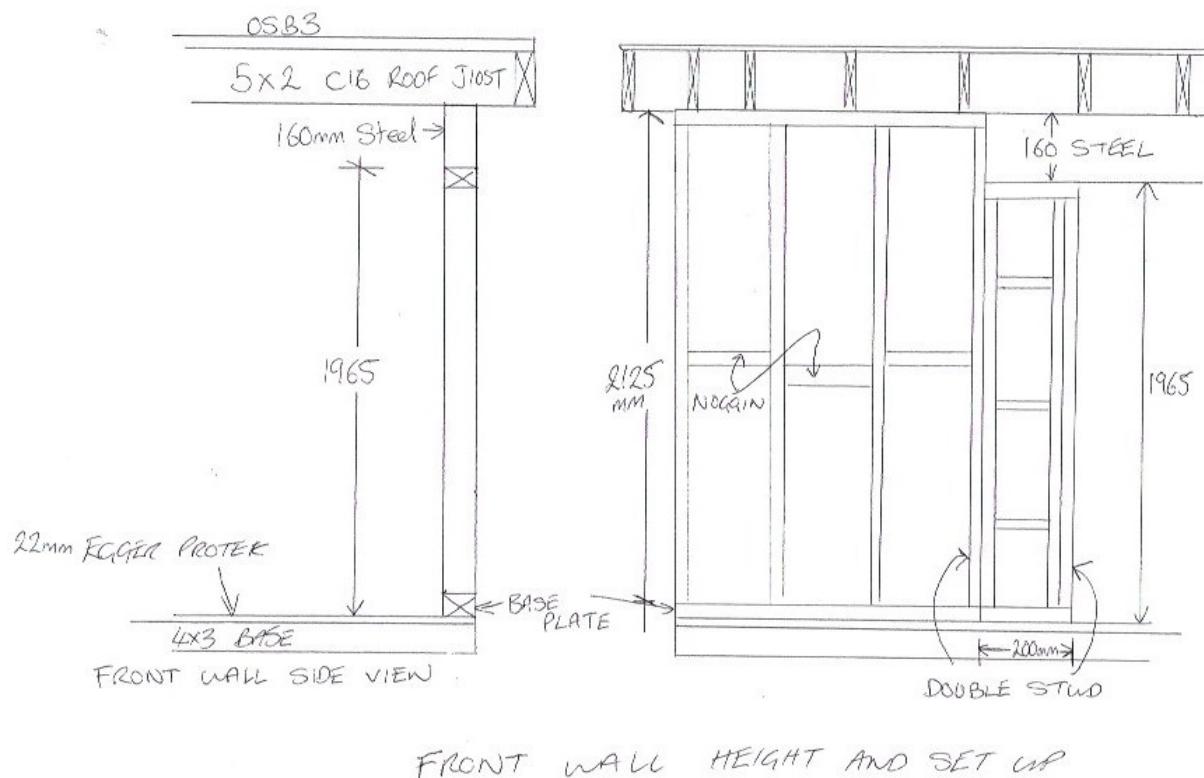
If you have bought the more expensive Egger protect it is fine to leave unprotected, if not it is a good idea to cover with visqueen to keep the rain off until you are working on it.

Your base and flooring is now complete!

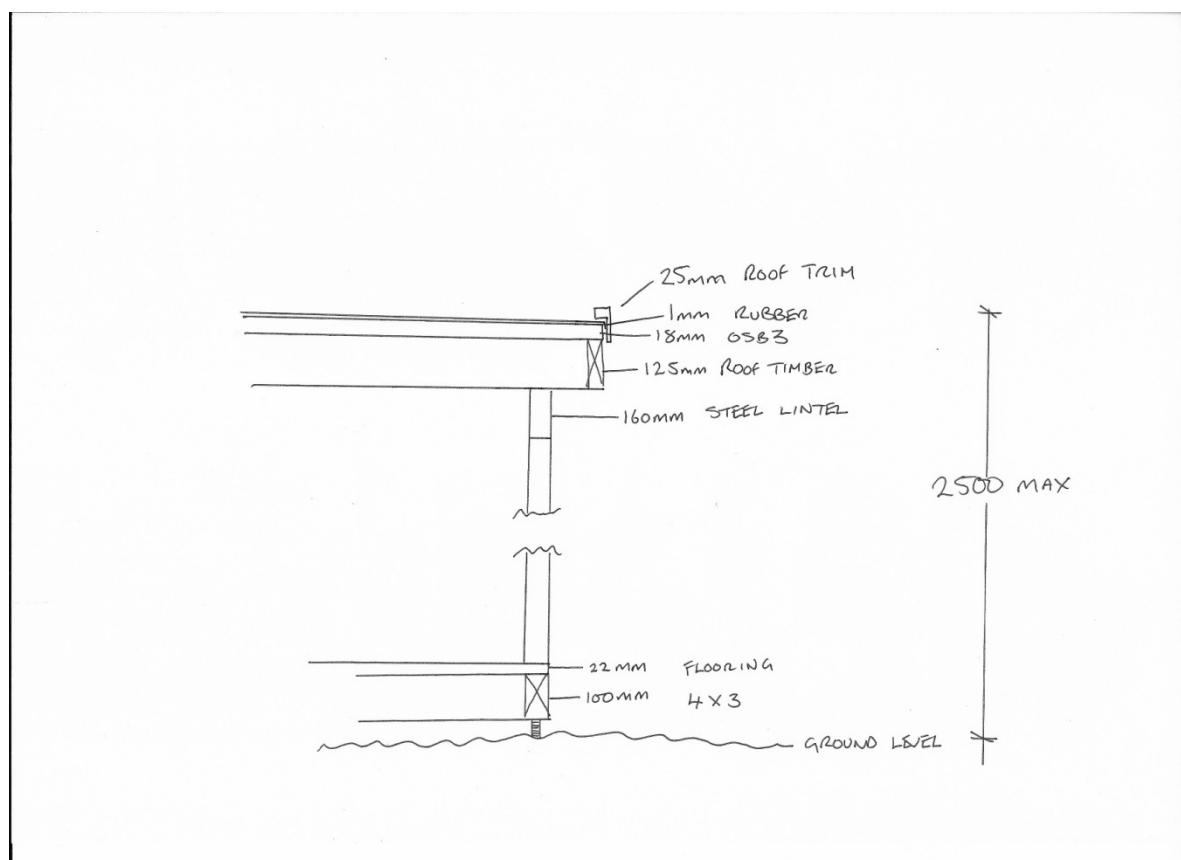
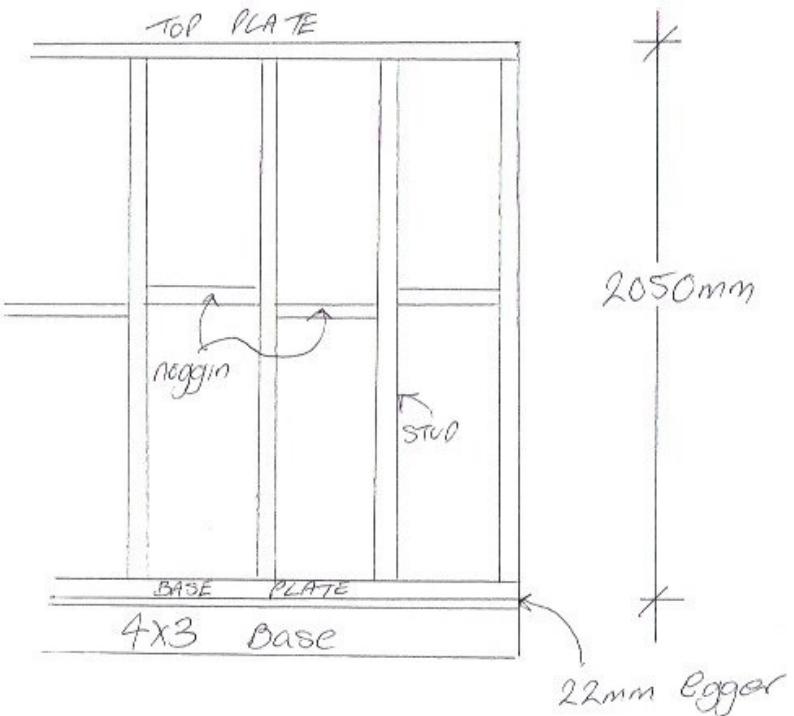
Wall construction

Please follow all instructions in order and complete all

It is important to follow your local councils guide lines about permitted development and in most cases the height is a max of 2.5mtr. With this in mind you need to work out the height of your walls to allow it to fall under 2.5mtr. Below is an example we use which complies with the 2.5mtr restriction. It is up to you to make sure you are compliant with your local authority guidelines.



Back and side wall height and
make up



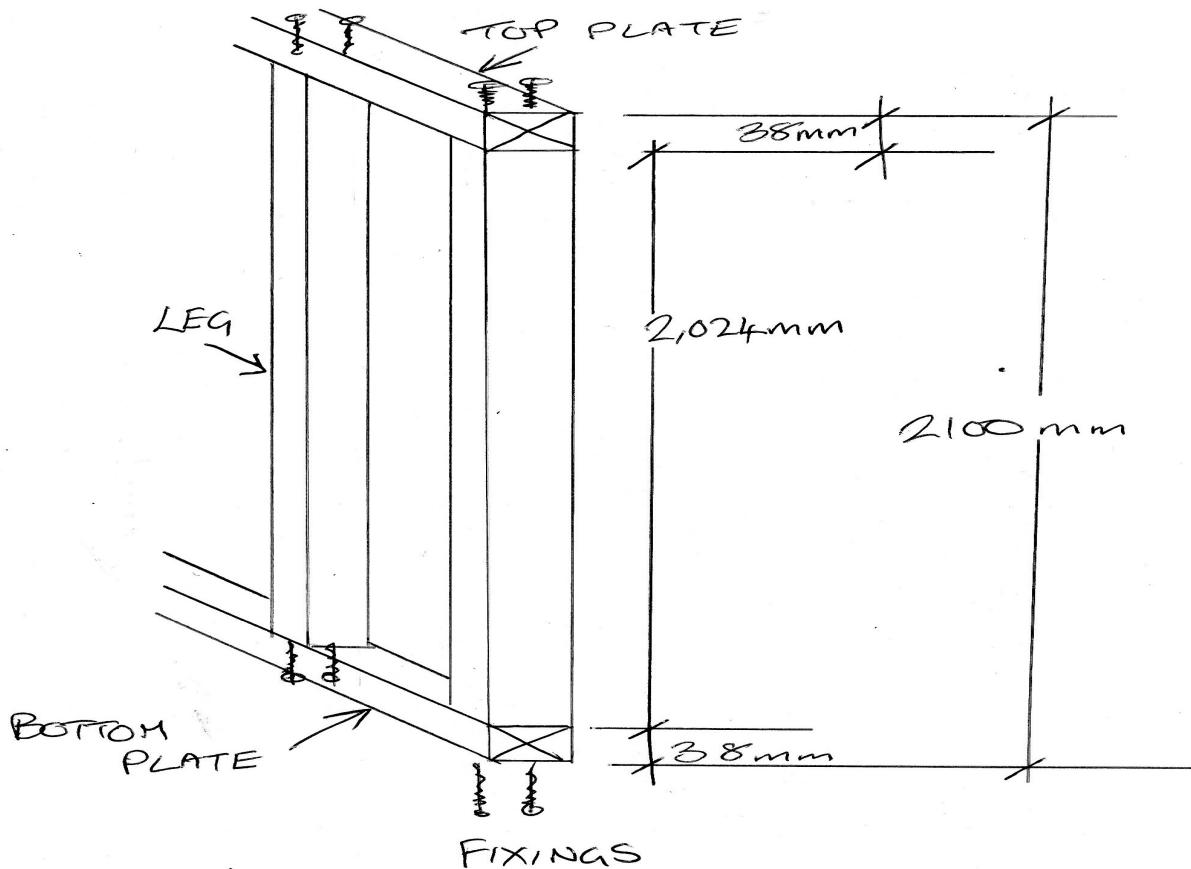
IT IS YOUR RESPONSIBILITY TO MAKE SURE YOUR MATHS IS CORRECT AS THE COUNCIL WILL THEN WANT YOU TO APPLY FOR PLANNING PERMISSION IF BUILT TOO TALL AND YOU GET A COMPLAINT!

If 2100mm(**for simplicity**) is the wall height in this case but don't forget when you make your wall you will need to deduct the top plate and bottom plate off your leg height to get your finished height.

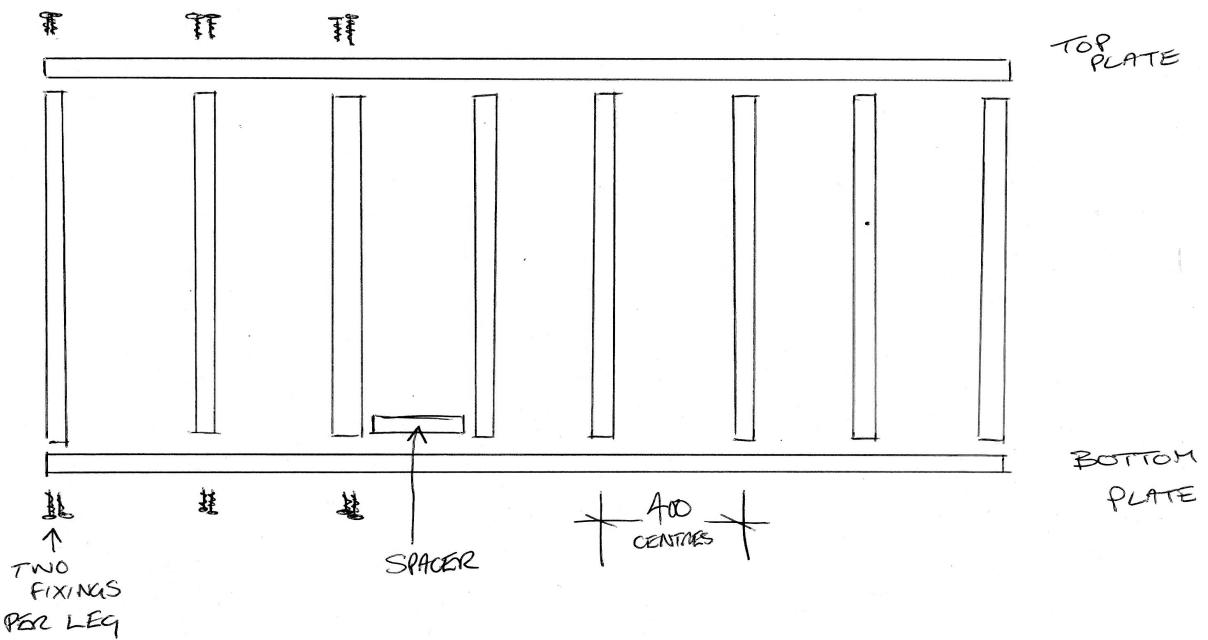
In the diagram below our overall wall is 2100 high. So we deduct top plate (38) and bottom plate (38) from 2100 and we get our leg height of 2024mm.

We can now cut our legs for the complete wall structure and build or frames for the walls.

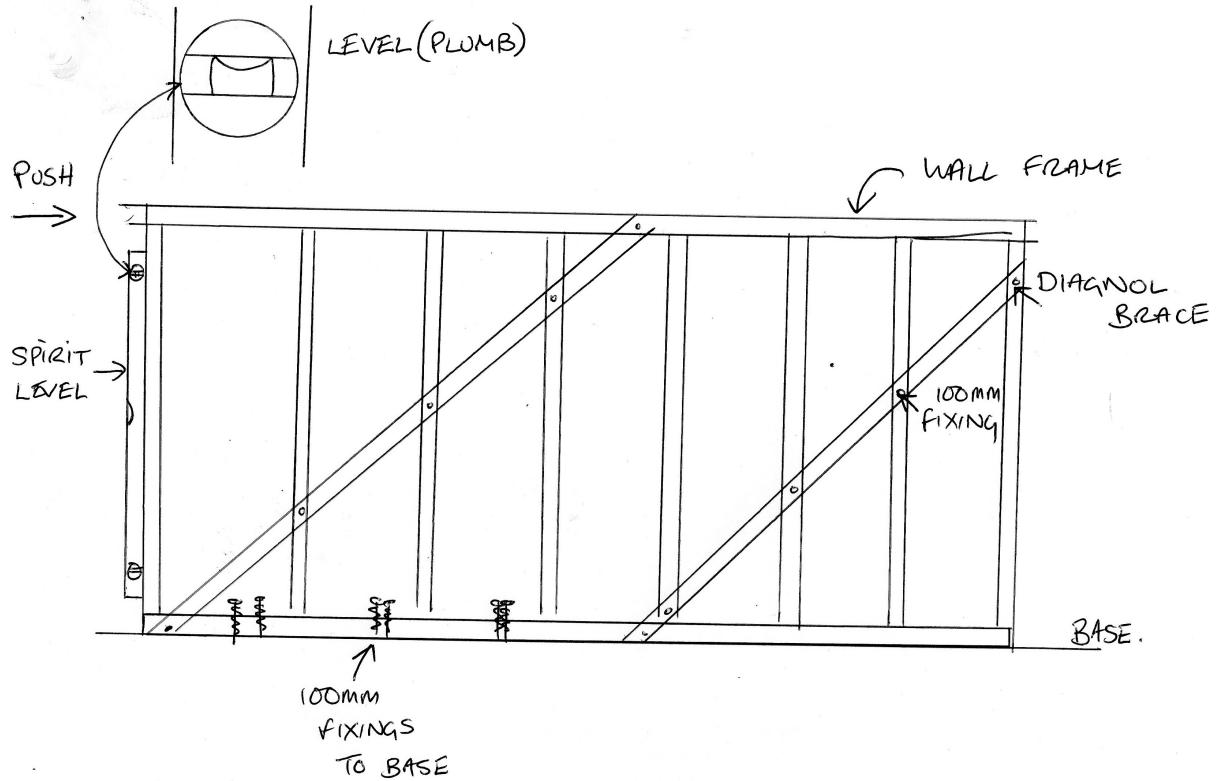
WE USE A ROOF FALL RATIO OF 25MM FOR EVERY 1000MM OF ROOM DEPTH. SO A ROOM THAT IS 3MTR DEEP WOULD HAVE A FALL OF 75MM FROM FRONT TO BACK.



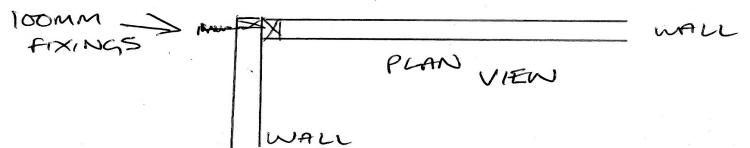
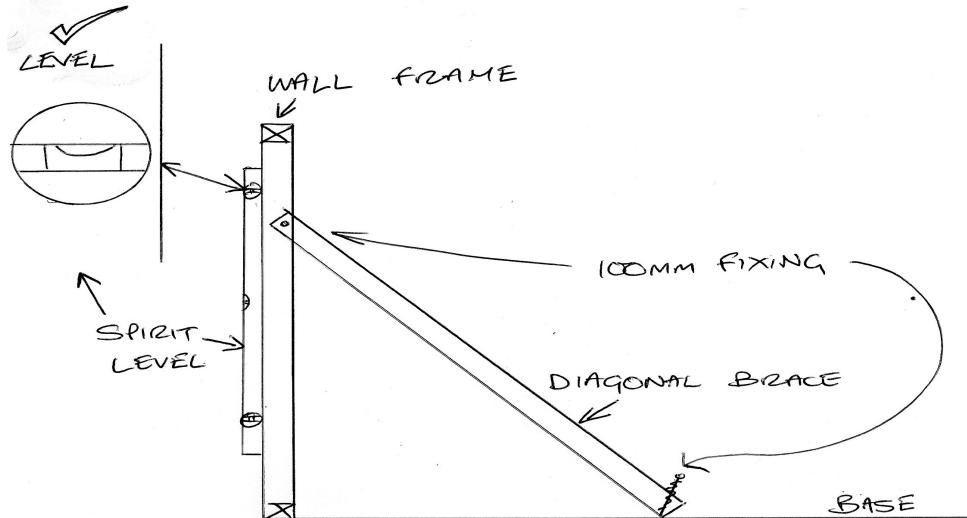
- Lay down two 38mm x 89mm cls timbers next to each other and mark them out for 400mm centres then build your frames.
- Build them on your new base as this will make it easy to construct. When you have built each one place it off the deck so you can build your next one easily.
- Use two 100mm screws or two 90mm paslode nails to secure to top plate and bottom plate



- Use a spacer to make sure your legs are correctly spaced as this will help when plaster boarding and when insulating.
- If your wall is longer than one frame, join two together but make sure you adjust spacing so legs still fall at 400 centres
- Do not worry about doors or windows at this stage as they can be cut out to suit later
- Once you have all your walls constructed you can now erect them
- Start with the back wall and fix the frames along the bottom rail to the floor, do this with just a few 100mm screws until you know it is dead straight.
- Once the bottom rail is straight fix at every space with two 100mm screws to the base
- The walls will stand up now and you can now start to level them.
- You need to use a diagonal braces to get the plumb(vertical), this is done by pushing the top of the frame until plumb and then whilst being held a diagonal brace screwed to each leg as diagram shows



- Repeat this procedure until you have the back and side walls up. You now need to plumb them the other way
- This is done by using diagonal braces fixed to the walls and the base as shown, when fixing these they are temporary and with this in mind it is a good idea to not send the screw all the way home as you may struggle to get it out after. Once you have plumbed both ways you can now fix the corners together and you should now have built a plumb and level frame work around the full perimeter



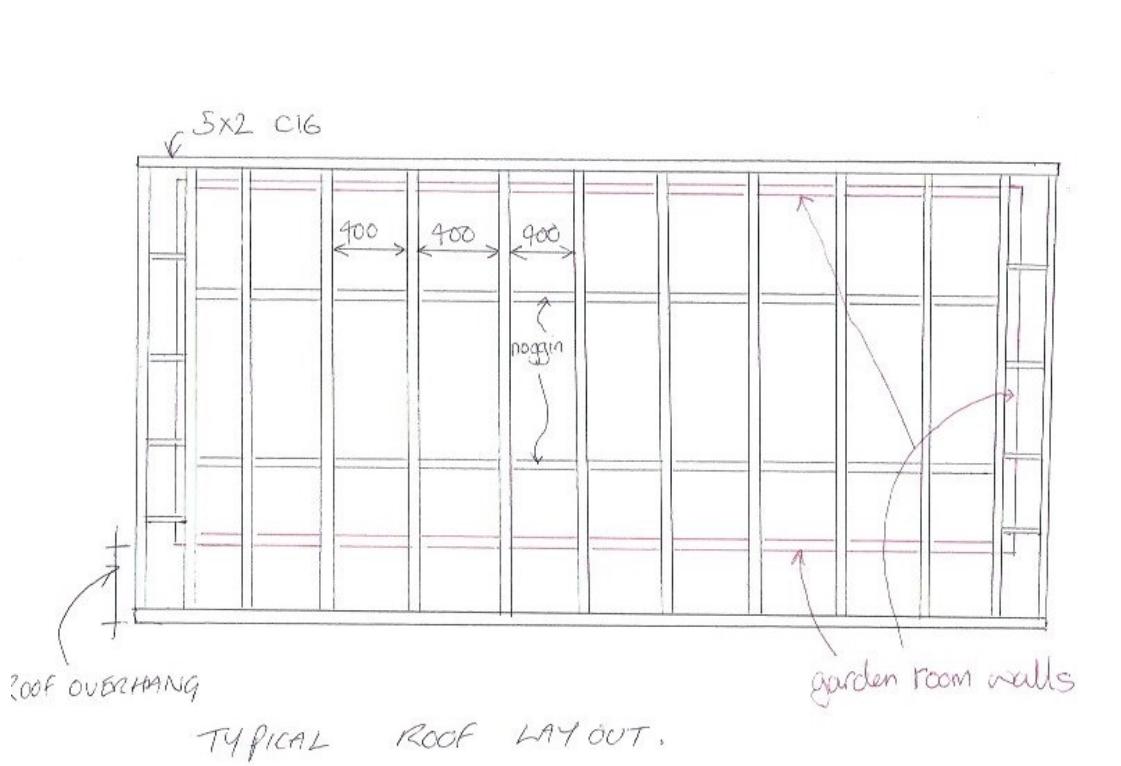
- Make sure to use plenty of 100mm screws or 90mm paslode nails to secure all the corners and floor plates.
- Now put a row of noggins in the full wall perimeter at mid height
- Although there will be a bit of movement, on the whole your structure should be now solid, plumb and level.
- Build the front wall as shown in the diagram above. You will need a minimum off 200mm for the steel to sit on, this also needs to be on double studs to carry the weight. **Use 5x2 for the front wall**
- We use a 160mm x 80mm x 5mm hollow steel beam to span the doors, this is fixed into place using heavy duty self drilling torx roof screws, please see our youtube video if unsure about the steel lintel detail.

Your wall structure is now complete!

Roof construction and rubber covering

Please follow all instructions in order and complete as directed

We will 1st talk about the roof construction and then the covering procedure. It is important to remember that you are now working at height and a fall from this height could lead to serious life changing injury or even death.

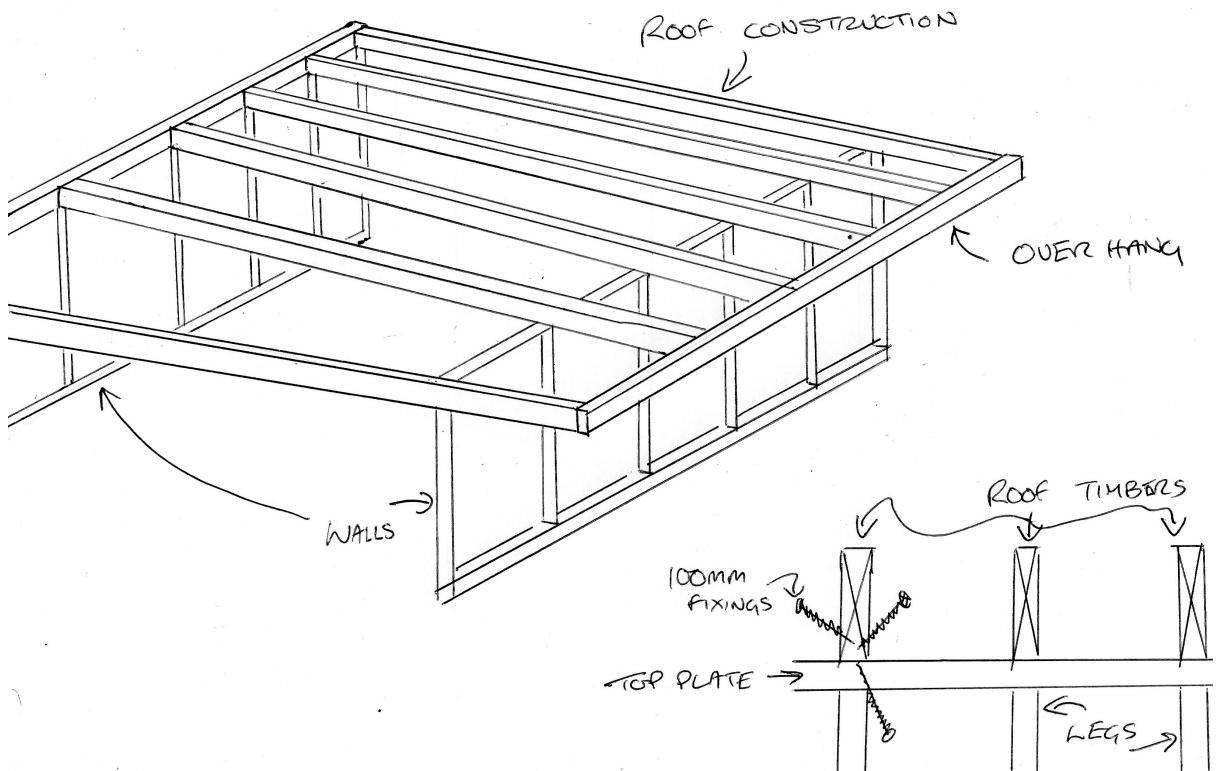


With this in mind it is your responsibility to make sure you are safe and I 'am only giving you advice on construction methods and not how to work safely at height.

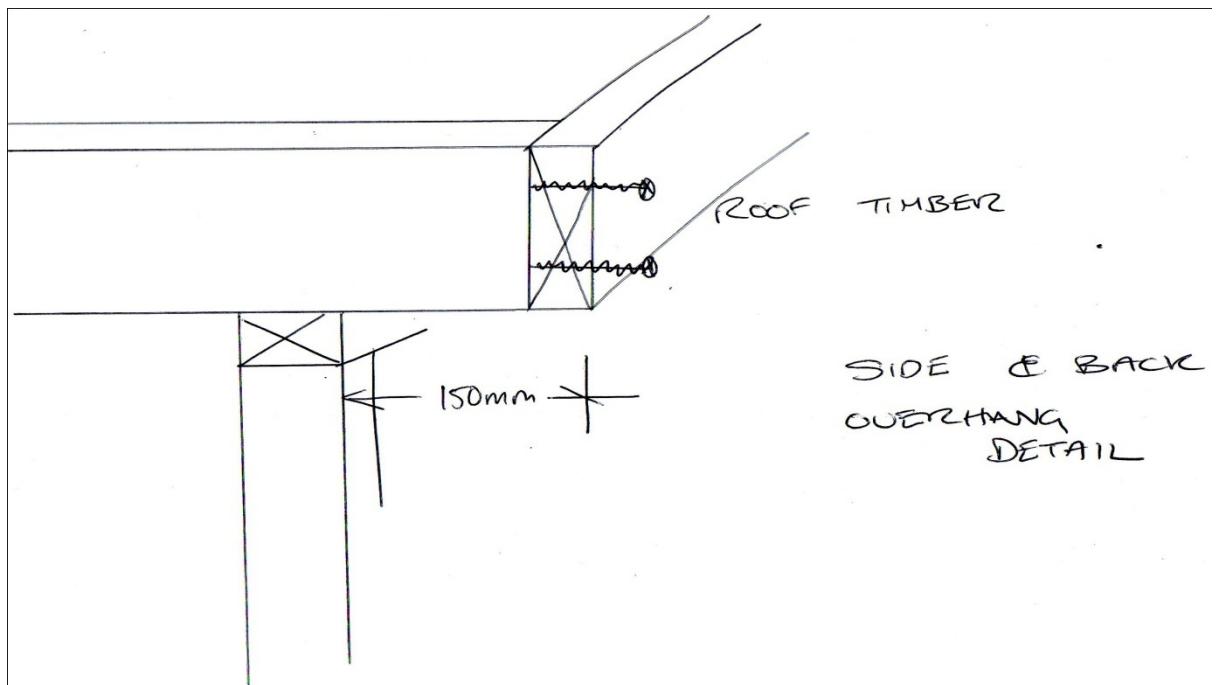
If in doubt contact a professional.

You must now decide if you are having an overhanging roof. You generally don't need one on the side or back but one on the front looks good and you can fit down lighters in there for a dramatic lighting effect.

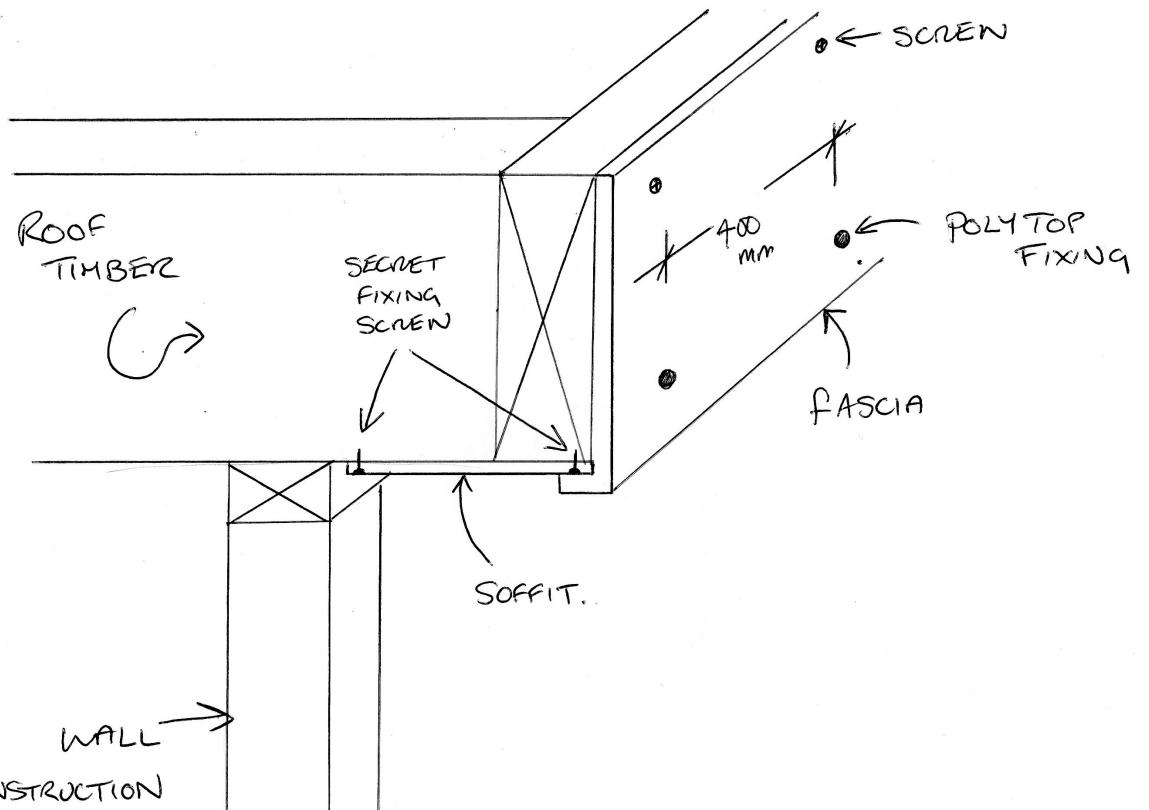
- cut all your roof timbers 125mm x 50mm to length required
- place all roof timbers on the back and front walls
- Fix the roof timbers using 100mm screws or 90mm paslode nails. Spike the fixings as shown and fix from below the top plate too.
- Where the roof timbers sit on the steel, we use upside down joist hangers to strap down.
- Timber is tech screwed to the face of the steel beam and this allows for the joist hangers to be fixed securely.
- Make sure your roof is securely fixed as the wind will rip it off if not.
- A row of noggin can then be put in using the same method as the wall noggin



- The roof structure needs to hang over the walls by 150mm on the sides and the back.
- This is done by letting the back hang over and fixing additional timbers to the sides.
- A timber is then fixed all the way around the perimeter to provide a solid fixing for the fascia and soffit boards



- When fixing roof timbers a minimum of 3 100mm screws or 3 90mm nails must be used
- You should now have a solid roof structure with noggin's running down the middle
- You can now fix the OSB3 down, this is done in the same procedure as the flooring and you need to make sure to use the polyurethane glue and fix every roof timber with 5 fixings as with the floor
- Make sure the OSB3 is cut neat and tidy all the way around the perimeter
- When the glue has gone off scrape off the excess with a chisel and get rid of any burrs or sharp bits.
- Make sure all fixings are sunk correctly and nothing is sticking up that will interfere with the rubber roof
- You now need to cut and fix your soffit all round. Make sure to fix correctly using polytop pins where seen and screws where not seen
- Now fit the fascia, this will be higher than the finished roof structure and can be cut off with a multi tool after fixing or if you haven't got one a hand saw laid on its side.
- Make sure none of the fascia is higher than the OSB3 itself and remove any sharp edges all the way around
- Any fixings that will be seen can be fixed with polytop pins, screws can be used where not seen
- Use a hammer as a spacer so they look good from the floor on the finished product



- Once the fascia and soffit are fixed you are now ready to fit the rubber roof membrane
- I get my rubber roof from Northern Building Plastics and I'm aware that there are different methods, trims, glues and fixings. With this in mind I will give you a guide how we do it, but bear in mind you need to follow manufacturer's instructions if you get yours from a different supplier
- Sweep the roof and make sure it is dust free
- Roll the rubber out so it covers the full roof and hangs over the edges
- Pull it out so it is relatively flat and in a good position
- Cut the excess rubber off around the edges and leave it overhanging by approx 300mm
- This will allow for any movement in the rubber when you roll it up
- Starting from one end roll the rubber up like a rolled up carpet
- Roll it back on itself until you have $\frac{3}{4}$ of the roof visible and the rest covered in rubber
- You can now apply the water based glue to the OSB3 keeping it back from the edges 100mm
- As you apply the glue say in a 500mm stripe roll the rubber back out over the glue leaving some glue showing still
- Have a friend use a soft sweeping brush to brush the rubber down onto the glue expelling any air bubbles as they go
- Now cut the rubber that overhangs to the manufacturers guide lines, mine is 50mm

- This is now fixed and you just need to fix the up stands , gutter trims and corner pieces
- These vary from manufacturer to manufacturer so please follow their instructions

Your roof is now water tight and all fascia and soffits are fixed!

Exterior wall claddings, 1st fix electrics and insulation

Please follow all instructions in order and complete as advised

You can now continue with the walls, we clad in OSB to provide rigidity to the building. The OSB boards are generally made in imperial measurements meaning they are 1220 wide and 2440 long. This means they will not match up with the spacing of the legs on the wall frames.

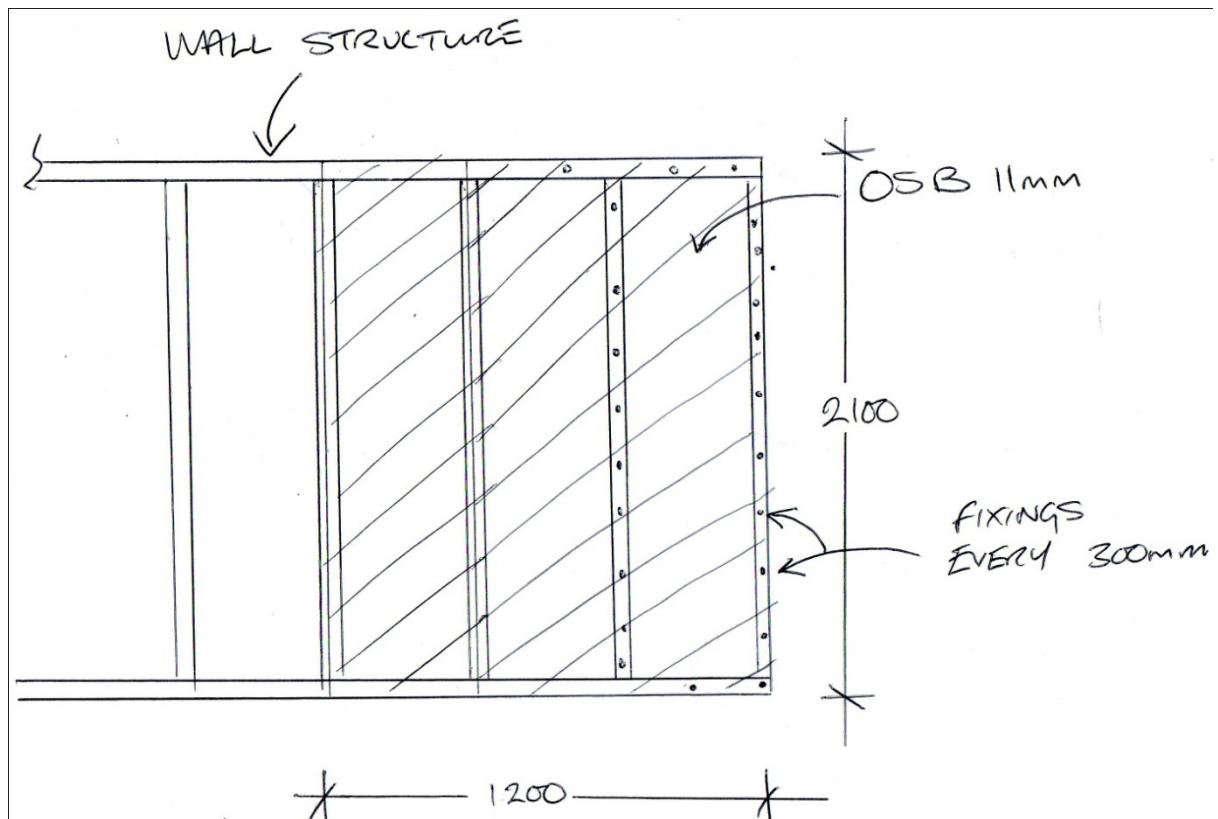
We have made the spacing's on the leg timbers to suit the plaster boards as they are metric 1200x 2400.

It's a bit of a pain but that's the way it is!

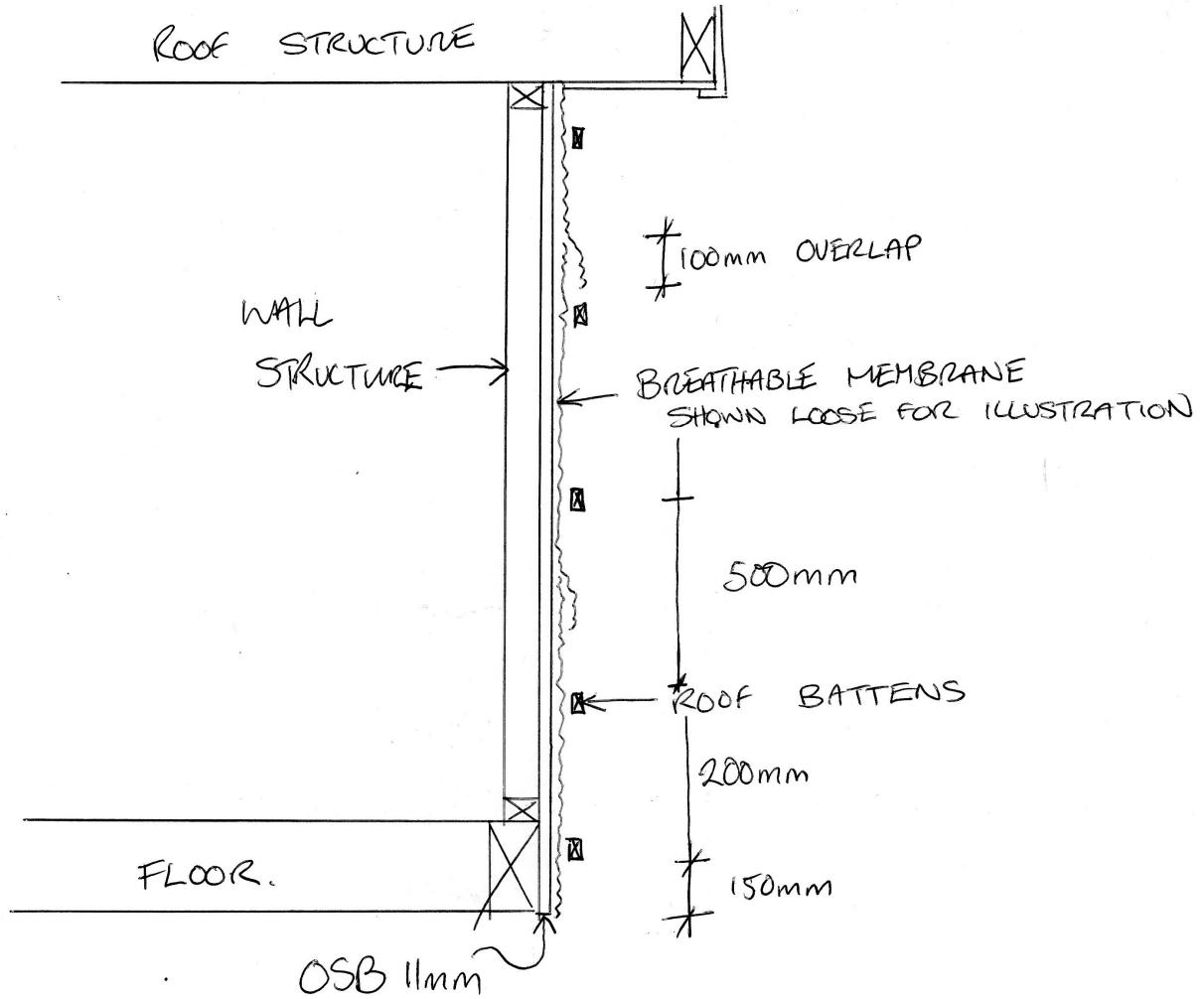
So you need to start from one corner and work your way around the building cutting the OSB to suit the nearest timber in the wall frame. Generally you will cut the boards from top of wall height to bottom of the base. Save the off cuts as you may need them to patch up.

Once you're set up it does not take that long

- Cut out any door openings and window openings from your wall frame work
- Start to fix the OSB around the building making sure you fix every 300mm vertically on the boards on every timber, use either 50mm paslode nails or 60mm screws



- Clad the full building with OSB making sure it is fully screwed or nailed
- Cut out any door or window openings
- Now wrap the full structure in breathable membrane starting at the bottom and working up
- Generally the membrane is 1000mm wide so you will need to put 2 ½ pieces up making sure to overlap the joints by 100mm
- You must wrap from the bottom up so any moisture runs down the front of the membrane and does not go inside the membrane
- Fix with staples
- Now fit the treated roof battens to the building
- It is a good idea to mark on the membrane where the timber uprights are (you can see these from where you have fixed the OSB)
- This will allow you to fix the roof battens to the frame work and not just the OSB
- Fix the 1st batten 150mm up
- Fix the second batten 200mm above that
- Fix the remaining battens at 400 spacings
- We double batten our builds where possible, vertical then horizontal depending on cladding direction.



- Once all the OSB and battens are fixed you can remove all your diagonal braces from the internal space
- Your building should now be rigid and water tight except for windows and door openings
- You can now fit the 50mm insulation in-between all the wall timbers.
- You must cut these tight and make sure that all gaps are filled, push the 50mm insulation tight to the osb
- These are best cut with a hand saw and then tapped into place
- You should now have fully insulated walls
- We then use a moisture barrier over the full interior of the wall structure, fixed with staples

It is now time to do your 1st fix electrics

If you feel this is a bit too much for your skill set then contact a qualified electrician.

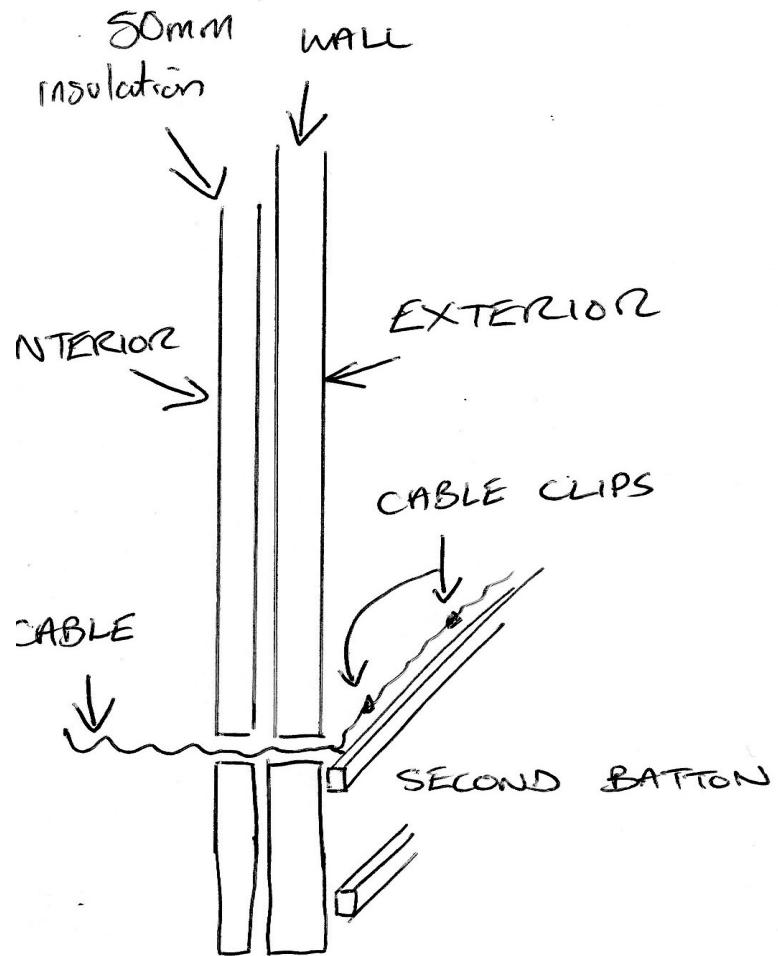
Either way you must get an electrician to check your wiring before connection to the mains supply which should only be done by a qualified person

ELECTRICITY KILLS!!!!!!!!!!

So we do not compromise the thermal barrier we run the majority of the wiring on the outside.

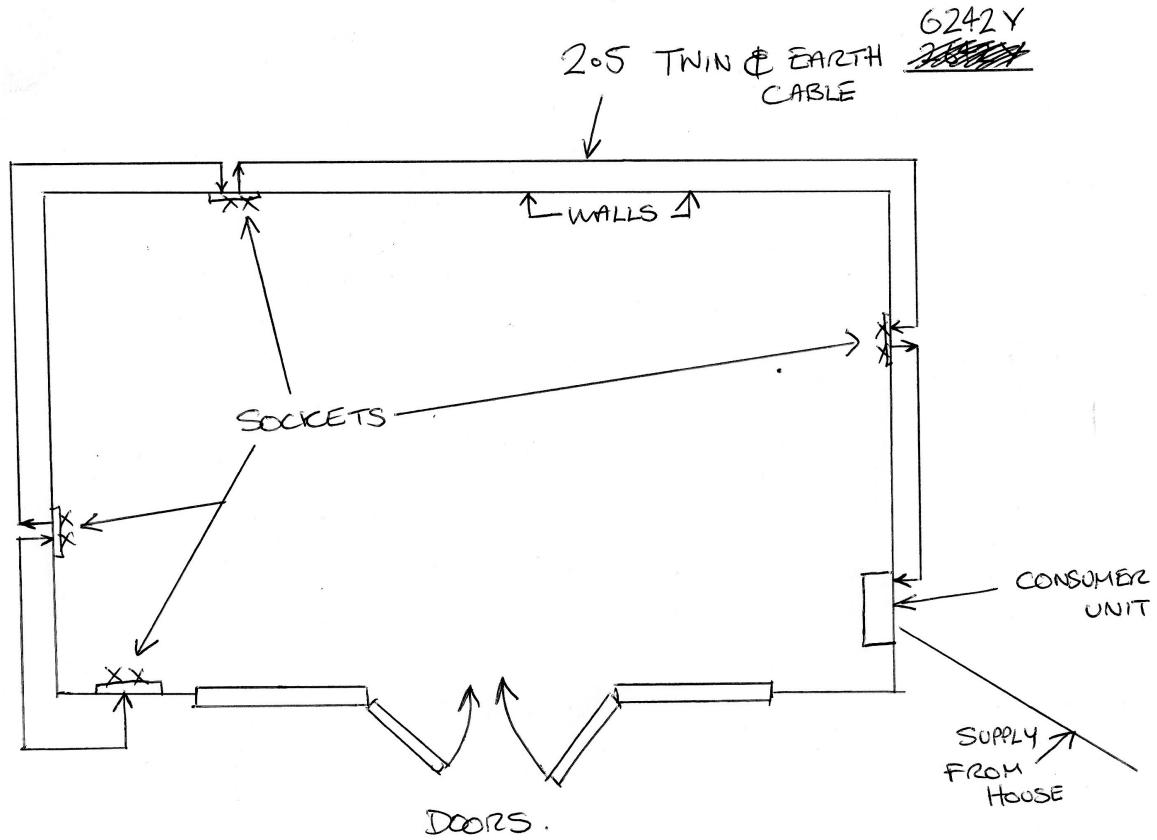
We 1st fix the ceiling lights then insulate the ceiling, the walls can be insulated, moisture barrier then plasterboarded before the power and heating cables are run.

- Decide where you want your power points, heater, lighting and tv etc, it is a good idea to fix osb Patrice where any heavy wall hung item will go to allow for secure fixing
- Plasterboard the walls
- Mark up where you want your sockets etc, and cut these out.
- Fit the back boxes
- Drill through the back off the box, through the membrane and OSB and feed the cables into the building



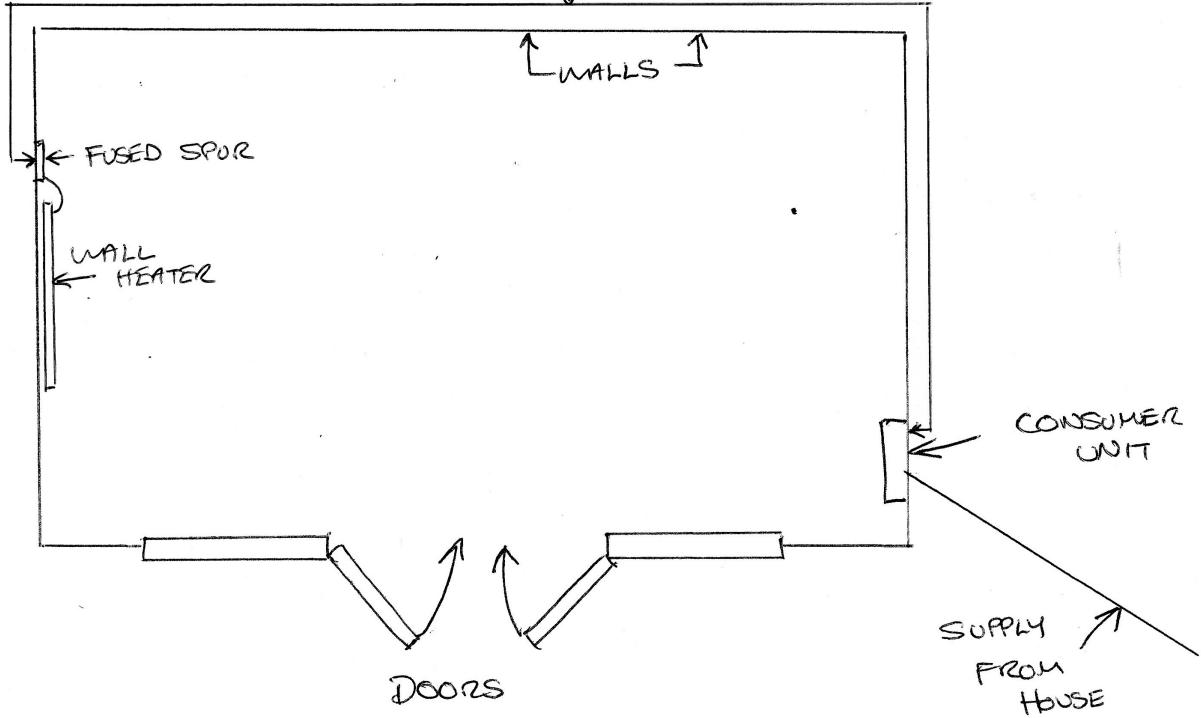
Below is a basic circuit diagram for power, lighting and heating.

If in doubt contact a professional

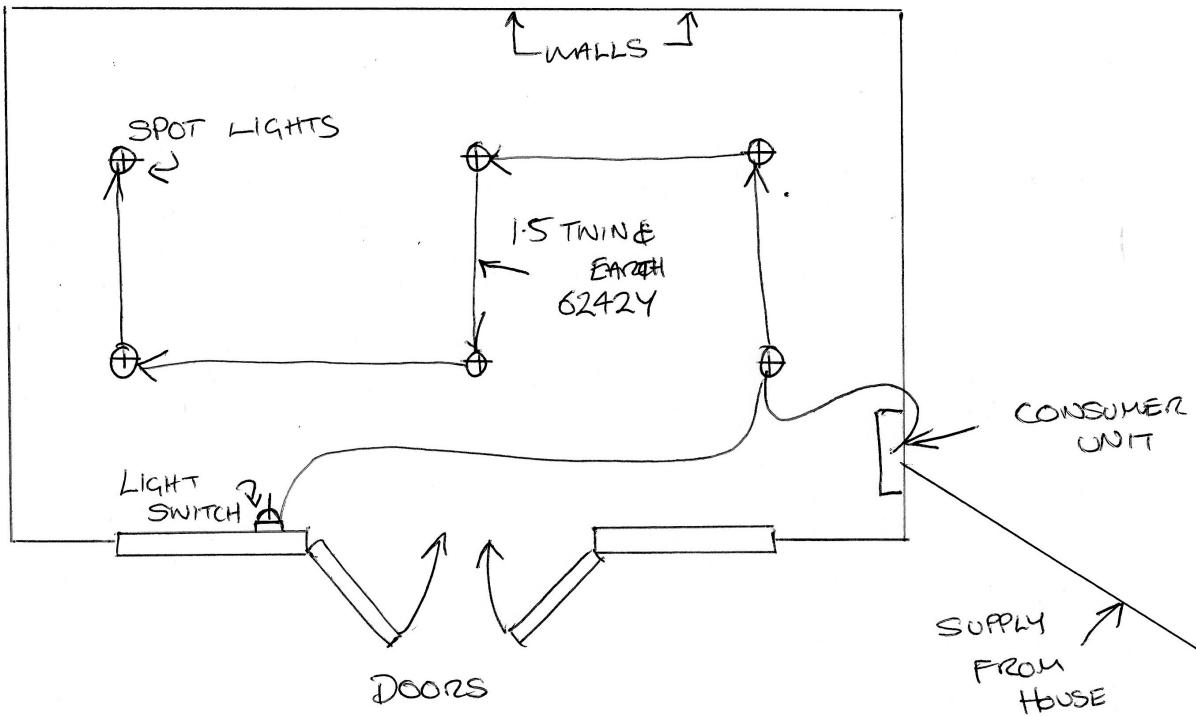


Typical radial showing 4 x two gang sockets wired with twin and earth 6242Y back to consumer unit

25 TWIN & EARTH ~~6242Y~~
6242Y



**Typical radial showing 1 x fused spur wired with twin and earth
6242Y back to consumer unit**



Typical light circuit showing 6 x down lighters wired with twin and earth 6242Y back to consumer unit with 1 way 1 gang light switch

If in doubt contact a qualified electrician!!!!!!

- Using the same techniques as the walls and floor insulate the ceiling with 100mm insulation, push the insulation tight to the underside of the osb3 roofing boards.
- **Those of you who watch the YouTube channel will know the warm and cold roof debate, we use this semi Hybrid compromise as height restrictions dont allow a warm roof, its up to you what system you use, this is only a guide.**
- Leave a hole for the spot lights, this need to be in the correct position and big enough to accommodate the clips and wiring for the spot lights
- Fit moisture barrier and fix with staples
- Plasterboard the ceiling
- Joints need to be staggered and on a roof timber, cut boards to suits
- Use a couple of 'T' shaped props to prop the plasterboard when fixing to ceiling
- All screws need to be plasterboards screws and placed at 300 centres

- It is advisable to do a sketch of lights and when boarded cut them out with a suitable hole saw

Your garden room is now ready for plastering!!!!

Plastering is a skill and if you have never plastered before I would advise getting a professional plasterer in to skim the room.

You don't want to make a dog's ear out of it at this stage, seeing as you have done so well so far.

Windows doors and cladding

Please follow the instructions in order and complete all procedures

So, your nearly there!

The inside is ready to be skimmed and the outside can proceed now.

Doors and windows are a personnel choice and come in all shapes and sizes with different configurations.

We tend to supply aluminium as the quality is far better, you may choose UPVC. Either way they all fit the same. You can fit them flush internally with the finished plaster and this will mean that you just need to fit a trim to cover the transition between door and wall or window and wall.

We fit them with a reveal now but used to fit them flush.

Use 100mm screws through the frames and fix into the wall timbers. Always use plastic packers to fill the gap between window and wall or door and wall as the screws will distort the frame otherwise.

French doors are easy to fit and will come with a guide to fitting if supplied by a quality company, if they don't ask!! They will provide you one. Bi-folds are slightly trickier to fit. It may be worthwhile asking a local company if they have a fitter who can fit for you.

As the frames are all different profiles I cannot tell you where to fix and how many fixings etc... so follow manufacturers instructions.

Same applies for bi fold doors, as long as your floor is level, and it should be!

Take your time, plumb them, level them, pack them out with packers and they will glide

Take note of toe and healing when glazing them. The glass is heavy and will sag the units if not toe and healed correctly. Because of the different configurations the toe and healing guides are variable so follow the installation guide.

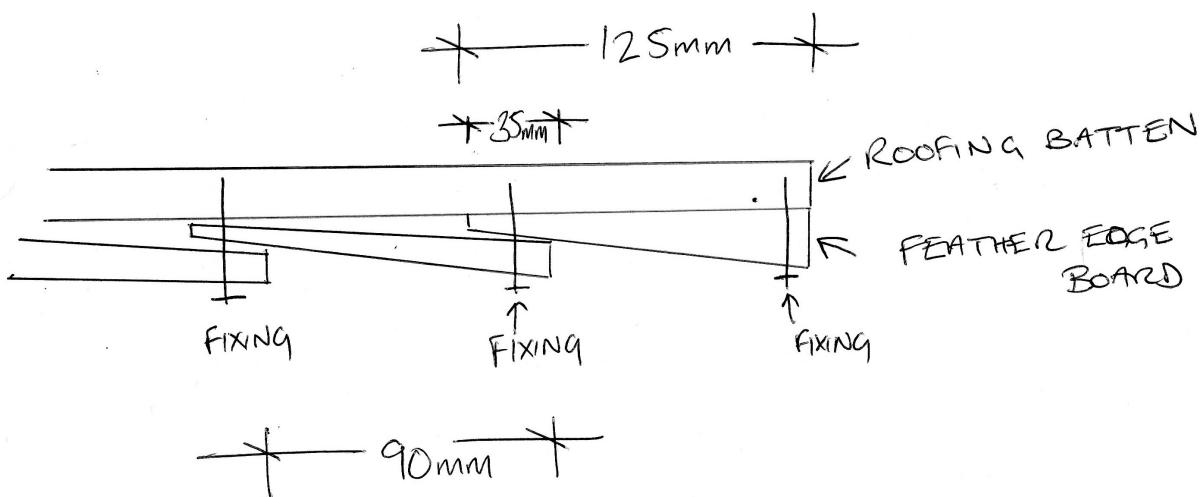
Fill any gaps with expanding foam and cut back excess when dry

Now you are ready for the external cladding.

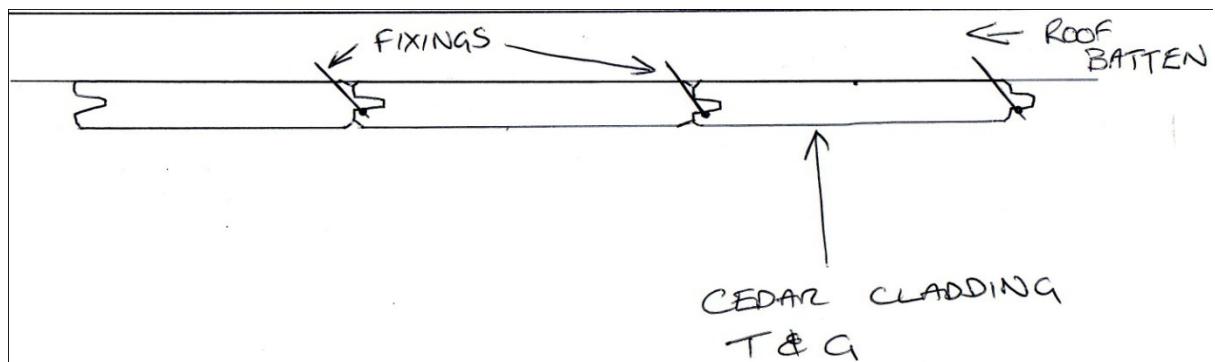
Cedar cladding is very expensive and we tend to fit it only on the visible elevations.

Feather edge board is used where not visible; it provides a good finish and is cheap to buy

- Decide which sides are going to be clad in feather edge
- Cut all the feather edge the same length
- It wants to fit tight to the underside of the fascia and sit a couple of inch above the floor
- Because the base is level and the roof is level all boards can be cut the same length
- Fit the first board vertically and use a level to plumb it
- Using a spacer you can now fit the next board
- Feather edge board is different widths throughout the country
- Ours is 125mm wide so we use a 90mm spacer and fix through both as we go
- Fix into every roofing batten taking care not to hit the power cables



- We use a paslode with 50mm galvanised angular ring shank nails for this, or the coil nailer with ring cut nails. But you do need to use galvanised nails either way
- Continue this for all elevations to be clad in feather edge board
- Corners and ends are completed by turning the last board so the end is the thick end then nailing by hand
- Cedar cladding is expensive you may wish to use another type but it looks great and provides a beautiful finish
- Because the roof is sloped the side will vary in length, we have found the easiest way to do this is cut them all long, fix and trim level at the bottom with a multi tool. We then use a bead around the top to cover any gap.
- Nail 1st board through the tongue using a level to plumb
- It will also need a row of nails down its tongue side too
- Nail all consecutive boards through the tongue into each roof batten, this should give you a secret nail fix check every 5th board for plumb and alter if needed
- Use pre moulded corners to cover the corners as they provide a nice finish



- Use stainless steel pins and pin them in at an angle similar to shown
- Finish round doors and windows with pre formed angle trim or make a trim.
- Before you clad behind the consumer unit you need to fit your SWA cable up the outside of the wall and into the consumer unit
- Use cleats to hold this back and cut roof battens where necessary
- Finish all cladding
- Run the SWA to the house supply burying it where necessary and surface fixing it where applicable

Use a qualified electrician to connect up and second fix unless you are competent

Your garden room is now almost finished.

All that should be left to do is fit the flooring and skirting boards

**Stand back approximately 10mtrs from the
garden office and feel proud, you did it !**

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