



DIY GARDEN ROOM KIT

INSTALLATION GUIDE

Our Step by Step Guide to installation of your Shell, Shell
& External or Complete SIPS Garden Room Kit





Thank you for purchasing a Future Sips Garden Room Kit. These instructions will guide you through the process for installation of your garden room kit.

Please refer to this guide in conjunction with your project specific drawings, which will provide you with the reference numbers for all panels and the names of your labelled timber components.

For support and assistance please call **01452 501455**.



BEFORE YOU START



✓ **Site Suitability**
Ensure your site is suitable for your foundation system, with good drainage, and not prone to flooding

✓ **Store appropriately**
If you are not starting your room build straight away, ensure materials are appropriately stored

✓ **Check Delivery Items**
Please check your delivery items received against the manifest. Contact us to report any missing items

✓ **Wear PPE**
Safety Boots should be worn throughout the build; Safety glasses, ear protection, dust masks and gloves where appropriate

✓ **Unload safely**
Following manual handling best practice and unload safely

✓ **Have enough help on hand**
To assist lifting and manouevering panels, following safety procedures

✓ **Read these Instructions**
Read the whole booklet through fully **before** starting and familiarise yourself with the build process. Watch our videos too.

✓ **Remember a First Aid kit**
Accidents do happen so have one handy, just in case!

PLANS & DRAWINGS YOU SHOULD HAVE

Within your pack of drawings, you will need to refer to these ones during installation:

Site & Groundscrew Plan – for context and info only to assist you with setting out the base for your room

Floor Bearer Plan – showing the direction and position of your wrapped floor bearers

Floor Panel Plan – showing the layout, positions and reference numbers for each floor panel and joining timbers

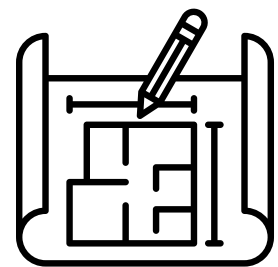
Sole Plate Plan – sets out the positions for Front, Left, rear and Right sole plates

Roof Panel Plan – showing the layout, positions and reference numbers for each roof panel and joining timbers

Elevations Plan – sets out the panel positions and references, along with joining timbers, for each wall elevation, including detail for Lintel installation and fixing.

TOOLS & ITEMS YOU'LL NEED

Project Drawings



Tools



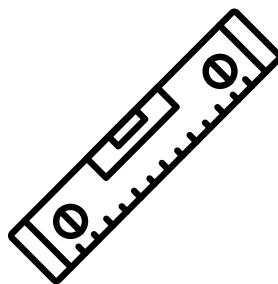
Hammer



Rubber Mallet

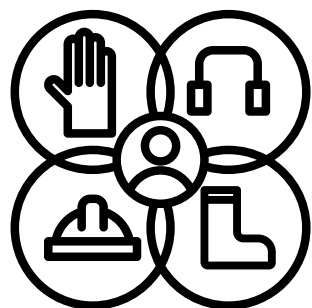


Hand saw

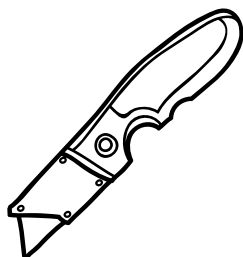


6ft spirit level

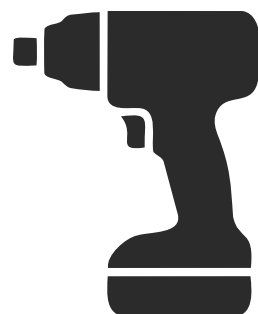
PPE



Staple Gun



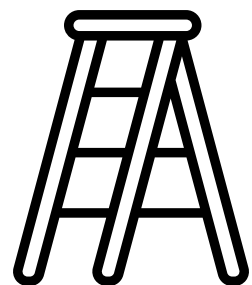
Utility Knife



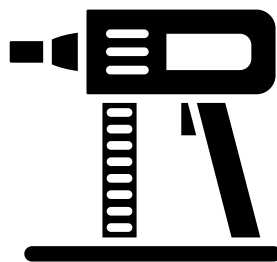
**Drill & Impact Driver
and drill bits:**

- Countersink
- POZI
- HEX

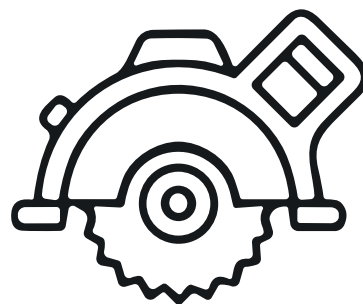
Access Equipment



(required for Shell & External &
Complete Kits only)



Brad Nail Gun



Circular Saw

THE BUILD PROCESS

**Follow the sequence of steps as set out below to build your garden room.
Further instructions and detail on each step is provided further in this guide.**

1

Bearers

Position bearers onto your chosen foundation in accordance with the drawings

2

Floor Panels & Joiners

Fix floor panels to bearers in sequence as specified on your drawings, securing with mechanical fixings

3

DPC & Sole Plates

Fixing DPC to floor and fitting sole plate to the perimeter of the room.

4

Walls

Install walls panels in sequence as shown on your plans, securing with the fixings supplied

5

Lintels & Apertures

Lintels will be installed between supporting wall panels as per your room design, fix as instructed

6

Top Plates & Firrings

Final step to complete wall installation, install as instructed.

7

Composite Roof

Follow your roof plan (same as floor plan) fixing as instructed. Take care when working from height.

8

Breather Membrane, Batten & Soffit

Breather membrane is applied to external walls, followed by 25mm batten.

9

Doors & Windows

Glazing should be installed by a registered FENSA fitter.

10

Cladding

Fix your chosen cladding, in accordance with the instructions

11

Roof Finishes

Complete the roof with flashings and guttering

12

Internal Finishes

Internal floor, wall and ceiling finishes depending on your model and specification

THE BUILD PROCESS

The Build process included within these instructions has been prepared to apply to all types of model and specifications of our garden room kits. Consequently, not all steps may apply to the particular kit you have purchased. Please see our chart below for which Build Steps apply to your kit.

	Classic Specification	Premier Specification
Shell Kit	Steps 1 – 7*	Steps 1 – 7*
Shell & External Kit	Steps 1 – 11	Steps 1 – 11
Complete Kit	Steps 1 – 12	Steps 1 – 12

**Roof installation (Step 7) on Shell Kits will be Addendum 1 – SIPs roof, not composite panels as included in this guide.*

STEP 1 – BEARERS

Parts – FLB, FLBa, FLBb, FLBc

Installing onto a Concrete Base

1.1 Firstly check your overall slab dimensions to ensure it is at least the same size or bigger than the **external** shell size of your garden room.

1.2 Check diagonal measurements of the slab – they should be equal. If the slab is bigger than the footprint of the garden room or if diagonals aren't equal then take extra care on next step to ensure floor is set square.

1.3 Position the DPC wrapped floor bearers onto the concrete slab ensuring spacing is accurate to the provided drawing and that they are set flush to the external shell size.

1.4 Check the diagonal measurement corner to corner and ensure these are equal.

1.5 Using a spirit level- check floorbearers are flat along length and width of building. If not then shim underside of FLB prior to starting the next step

Notes:

It is not necessary to secure these to concrete slab- however if you wanted to you can with the appropriate screw anchor fixings

The floor bearers are DPC wrapped timber. The DPC material should remain on the timbers.

Figure 1 – Concret Slab Dimensions

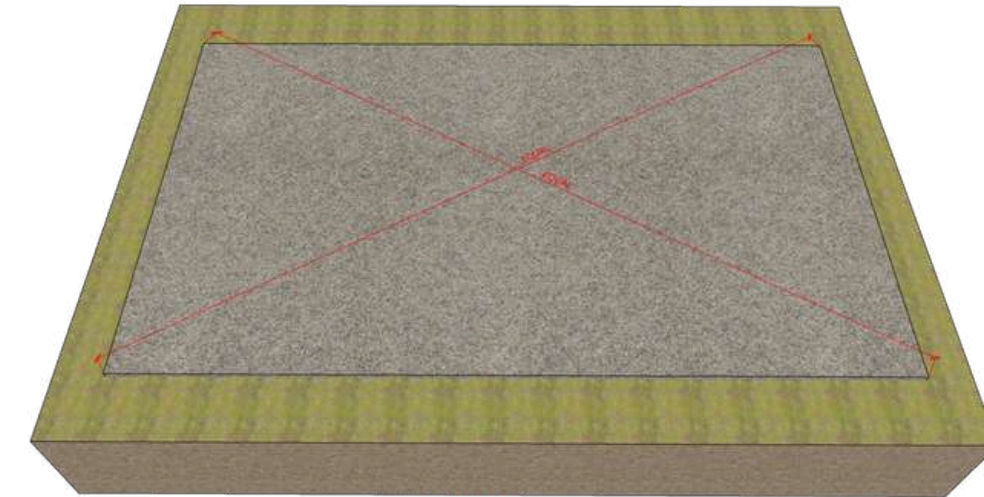
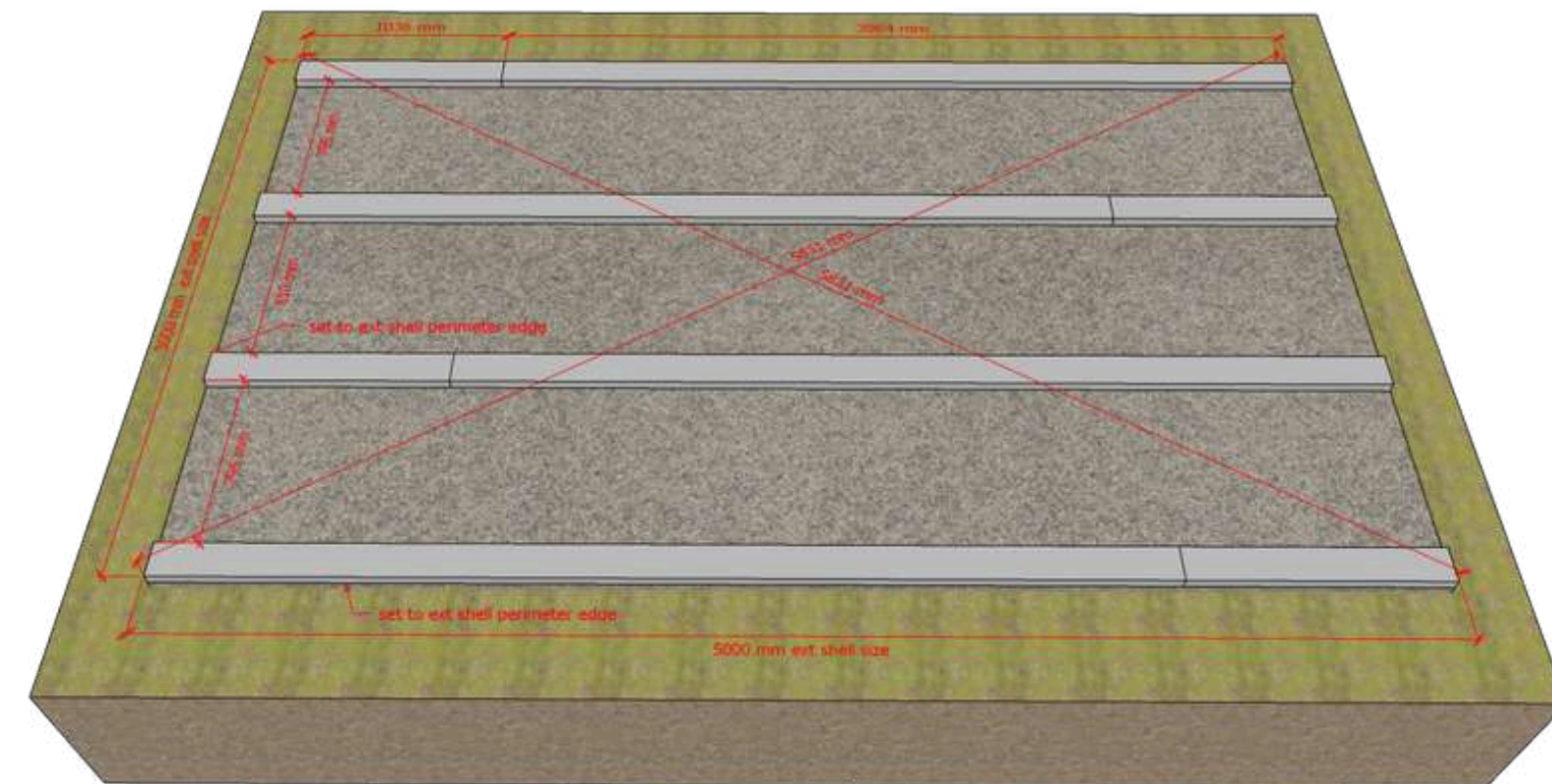


Figure 2- Floor bearers layout on concrete slab



STEP 1 – BEARERS

Parts – FLB, FLBa, FLBb, FLBc

Installing onto a Groundscrew Base

1.6 If installing onto ground screw foundation., ensure ground screw positions are accurate to the ground screw plan that has been issued with the suggested groundscrew positions shown.

1.7 Check heights between ground screws with a long spirit level

Note: If your ground screw installation has deviated from this drawing then you may have issues with later stages of install. Please let us know and we will try to assist.

1.8 With the ground screws set, position the Floor bearers FLB, FLB1, FLB2 onto the ground screws in accordance to the provided floor bearer drawing.

1.9 Check diagonals are equal and overall length and width doesn't exceed specified external shell size of garden room.

1.10 Check level of each floorbearer across structure width and depth and ensure this is level before proceeding. If not level then use plastic window shims (not provided) between floor bearer and ground screw to bring to level. Max shim height of 10mm.

1.11 When the dimensions are correct fix the floorbearer timber to the ground screws with 70 self drilling countersunk screws. It may be necessary to pre-drill these holes first.

Figure 3- Example Ground Screw Layout

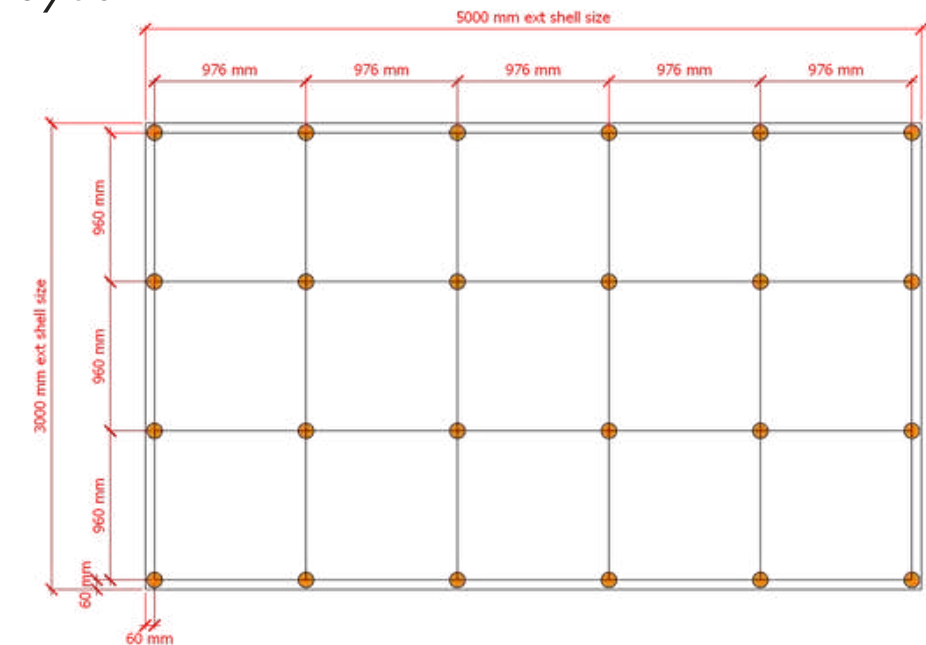
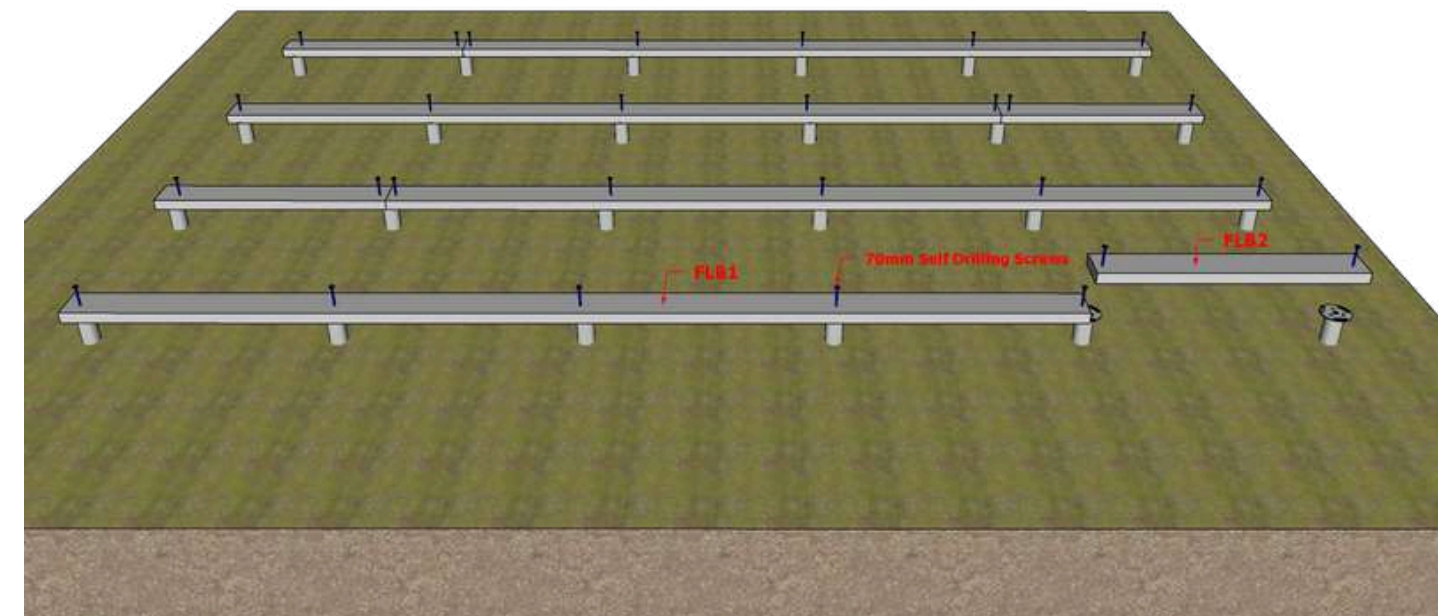


Figure 4- Floor bearers layout on groundscrew base



STEP 2 – FLOOR PANELS & JOINERS

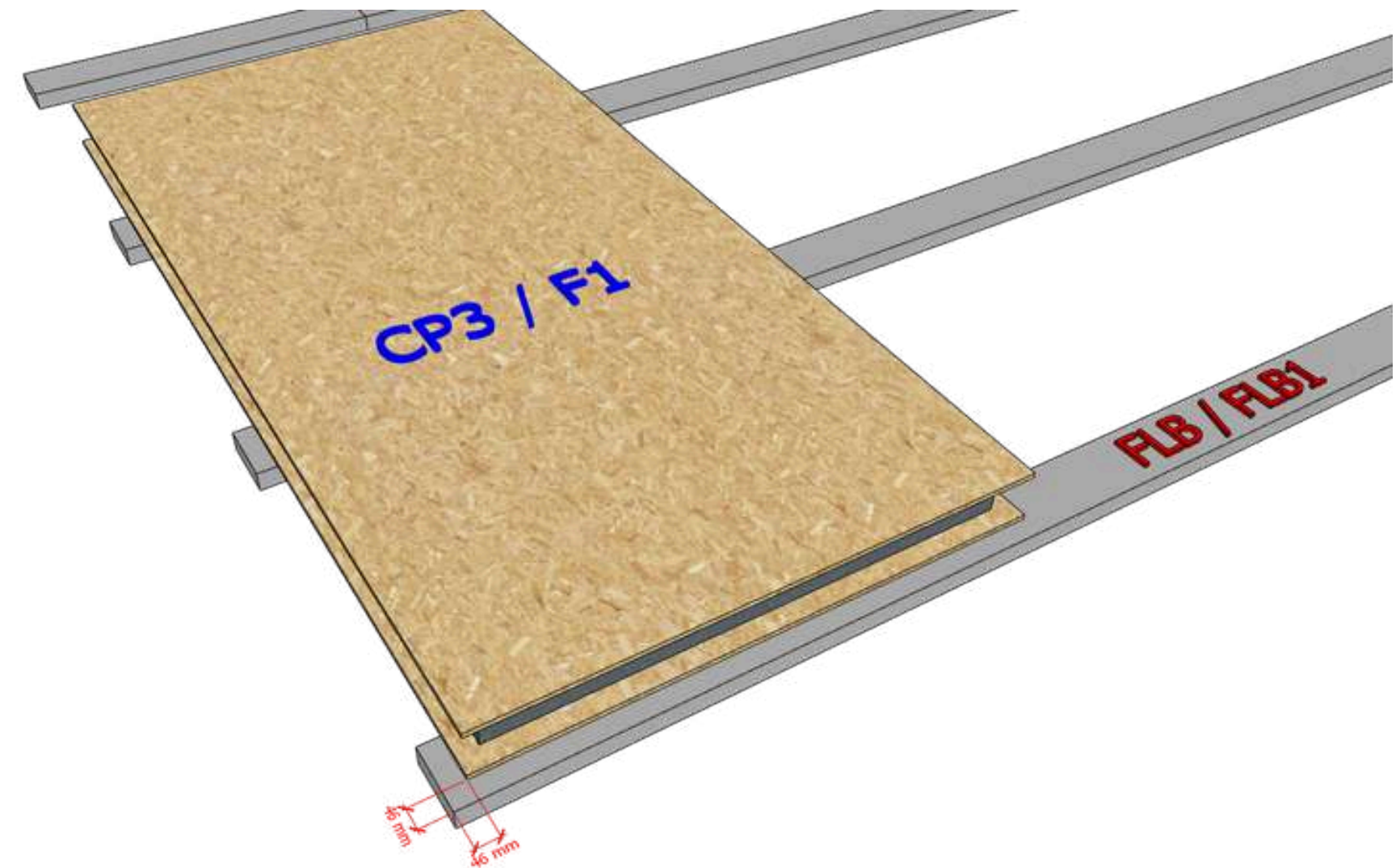
Parts– CP1, FL1, FL2, FL3, FLJ1, FLJ2, FLJ3

2.1 The next step is to install the floor panels onto the bearers.

2.2 It is usually best to start from the front left corner and refer to your Floor Panel Plan for the layout and numbering of each panel.

2.3 Set first floor panel onto FLB with the bitumen painted side facing down. This panel should sit on the floorbearer but not be flush to front or side. Instead ensure a 46mm setback. It may be necessary to temporarily tack this panel into place with 2no x 35mm screws through the OSB into FLB. – do not leave these screws in beyond step 6.

Figure 5 – Fixing of first floor panel



STEP 2 – FLOOR PANELS & JOINERS

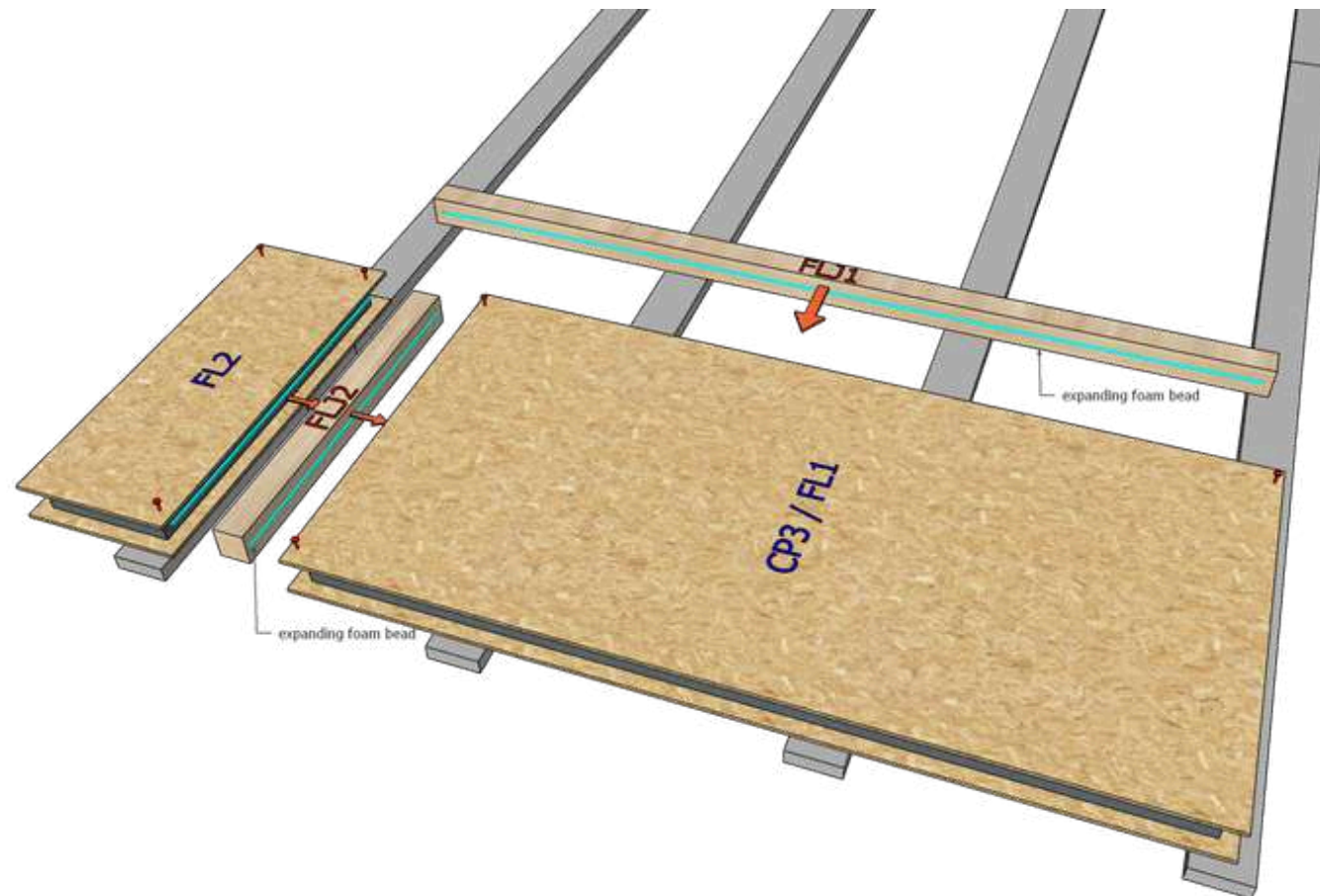
Parts– CP1, FL1, FL2, FL3, FLJ1, FLJ2, FLJ3

2.4 Run a bead of expanding foam on FLJ2 and insert into the first panel. Ensure this timber is full pushed into rebate and flush with insulation on both ends. It may be necessary to temporarily secure this into place with 2no 35mm wood screws

2.5 Position the second SIP panel FL2, run a bead of expanding foam in rebate and push onto the FLJ2.

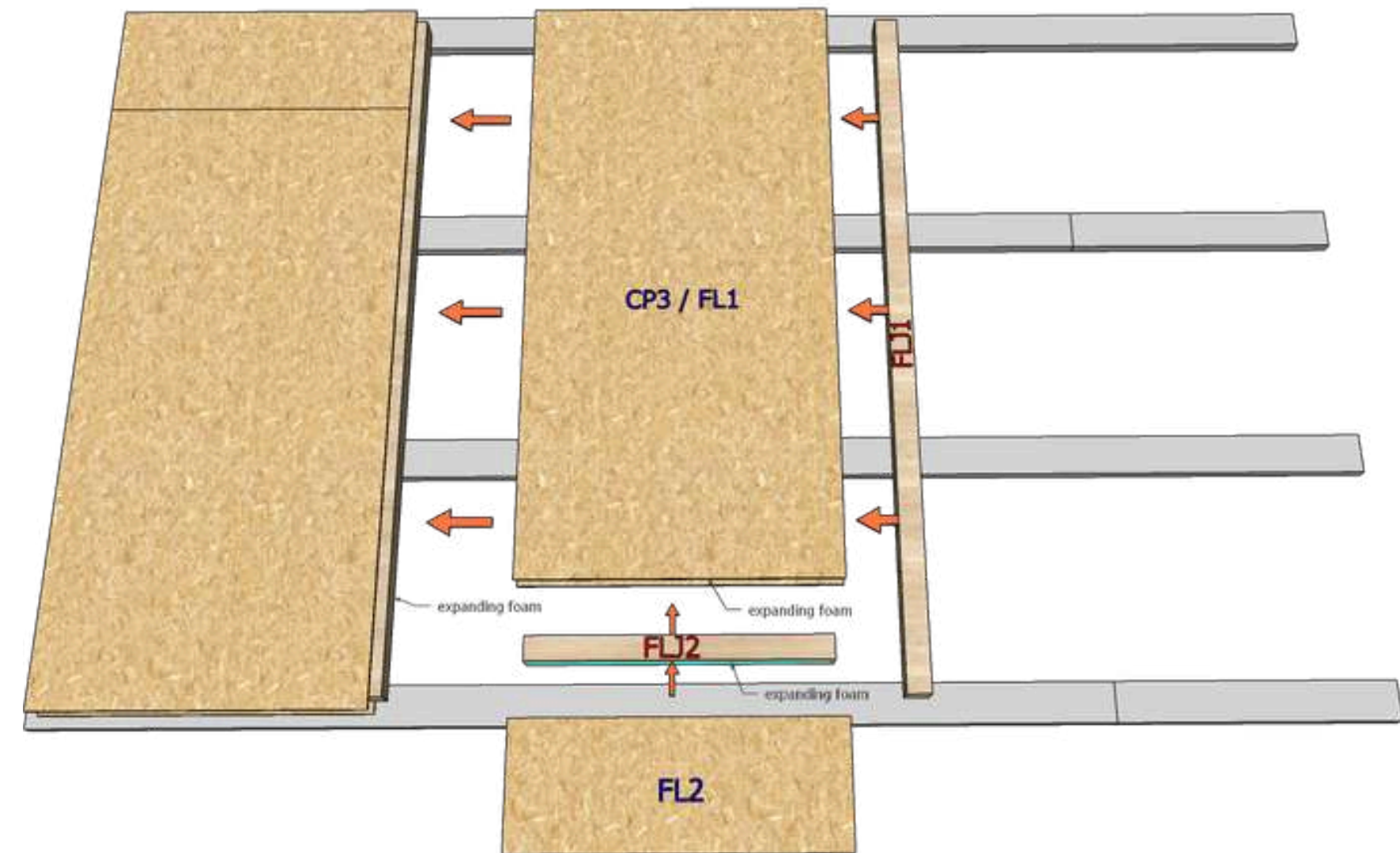
2.6 Following the same process, foam bead and insert FLJ1 into the first and second panel rebate..

Figure 6– Floor panel installation



2.7 Repeat previous steps for all of the remaining floor panels and floor joiners.

Figure 7– Floor panel installation

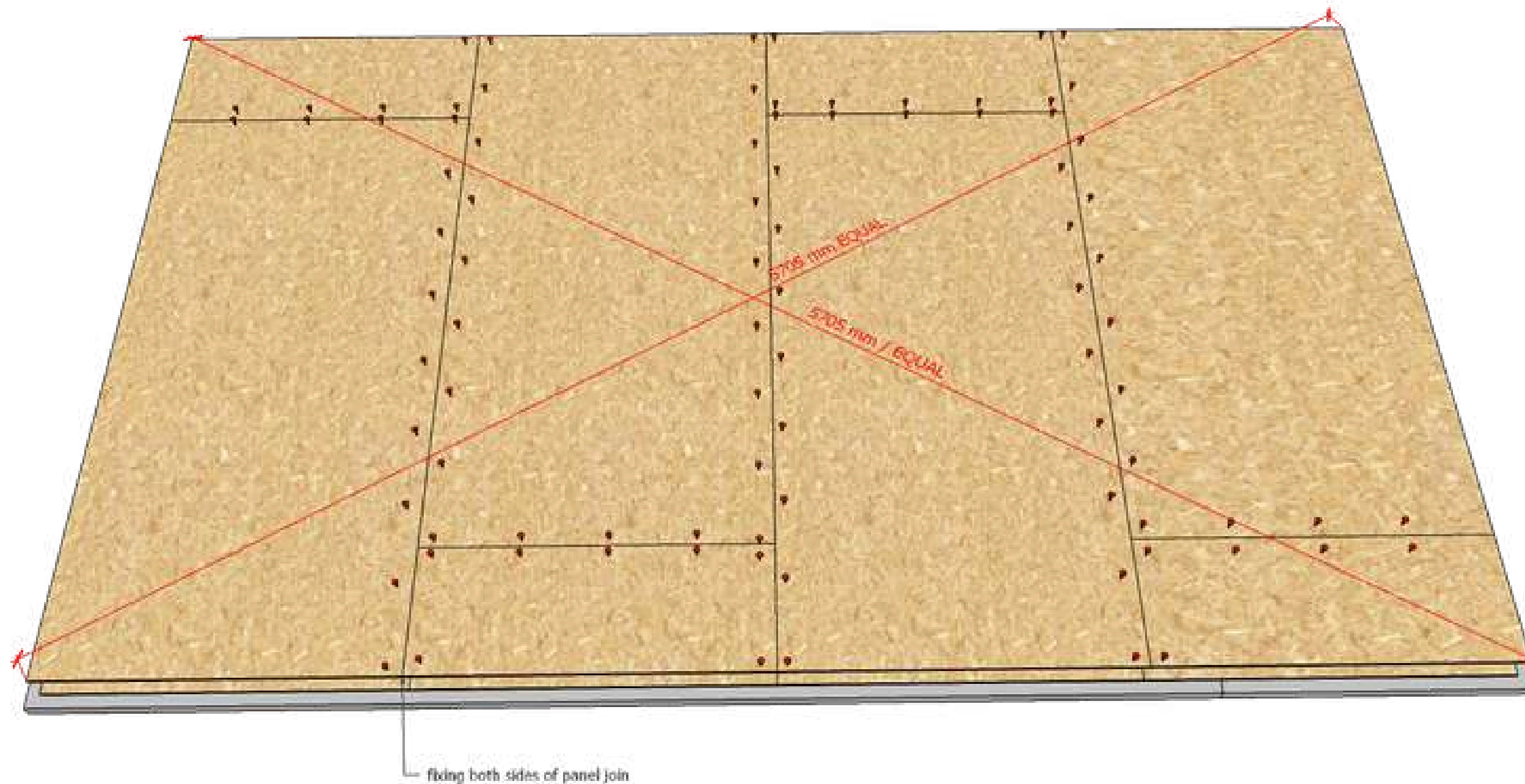


STEP 2 – FLOOR PANEL FIXINGS

2.8 Once all panels are positioned, check diagonal measurements corner to corner ensuring both are equal.

2.9 If you are happy with diagonals, fix panels to FLJ1 and FLJ2 along both sides of panel joins with a 35mm wood screw @ 300mm ctr

Figure 8 – Completed floor panels & joiners showing panel fixing positions



STEP 2 - FIXING THE RING BEAM

Parts- FLC1, FLC1a, FLC1b, FLC2, FLC2a, FLC2b

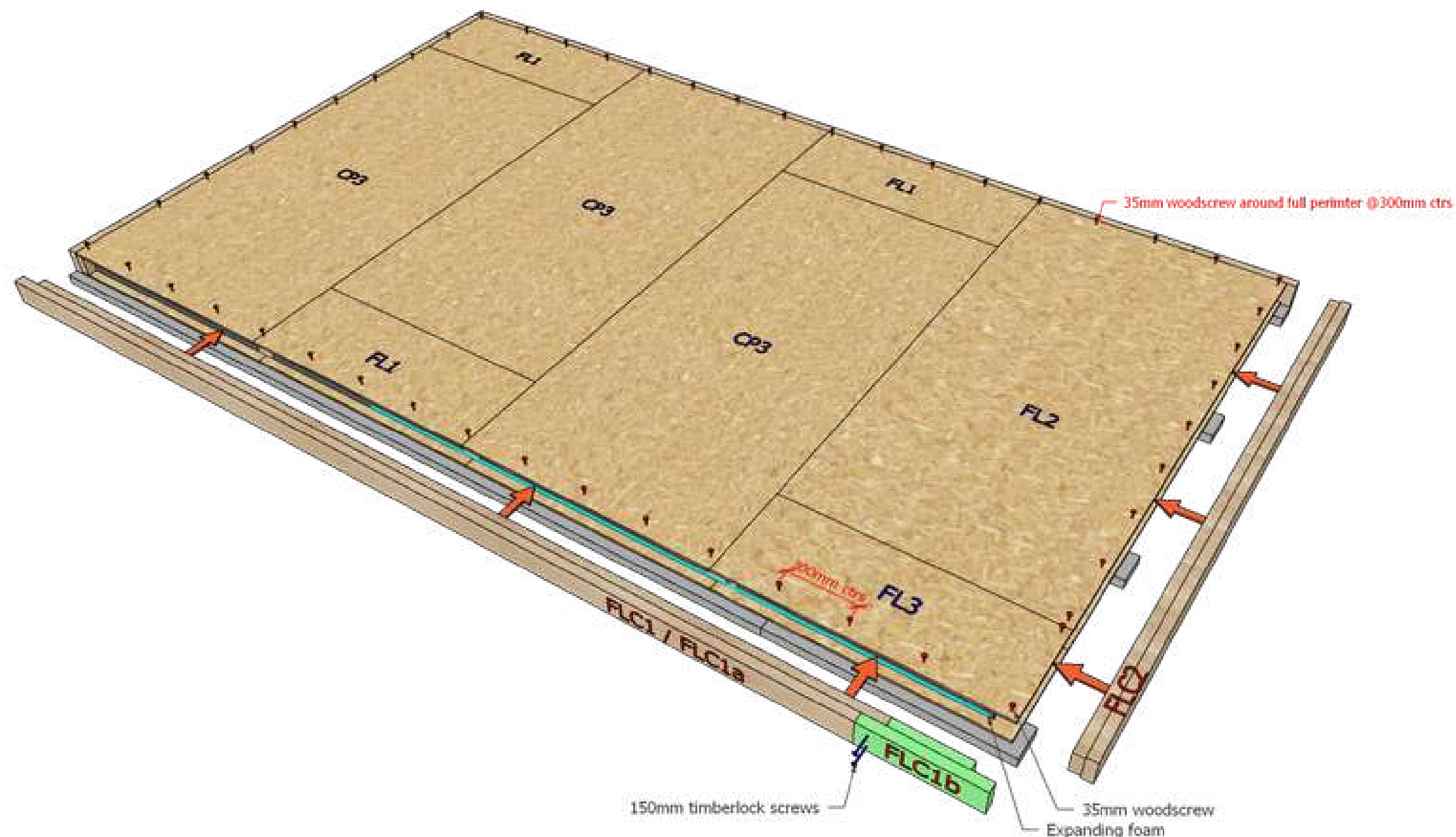
2.10 The ring beam is the structural perimeter beam of the garden room and will take the weight of the walls.

2.11 Spray foam bead and Insert FLC1 / FLC1a into the panel rebate along front edge and ensure insert it is fully set into the panel rebate. If your drawing shows a FLC1b then your building exceeds max timber length so is necessary to join another timber section to this frontage.

2.12 Spray foam and insert FLC2 into the side panel rebate and repeat process for all remaining floor ring beam caps.

2.13 Once in place fix in place with 35mm woodscrews down through panels into ring beam @ 300mm ctrs running full perimeter of structure.

Figure 9 - Attaching the ring beam



STEP 2 - FIXING THE RING BEAM

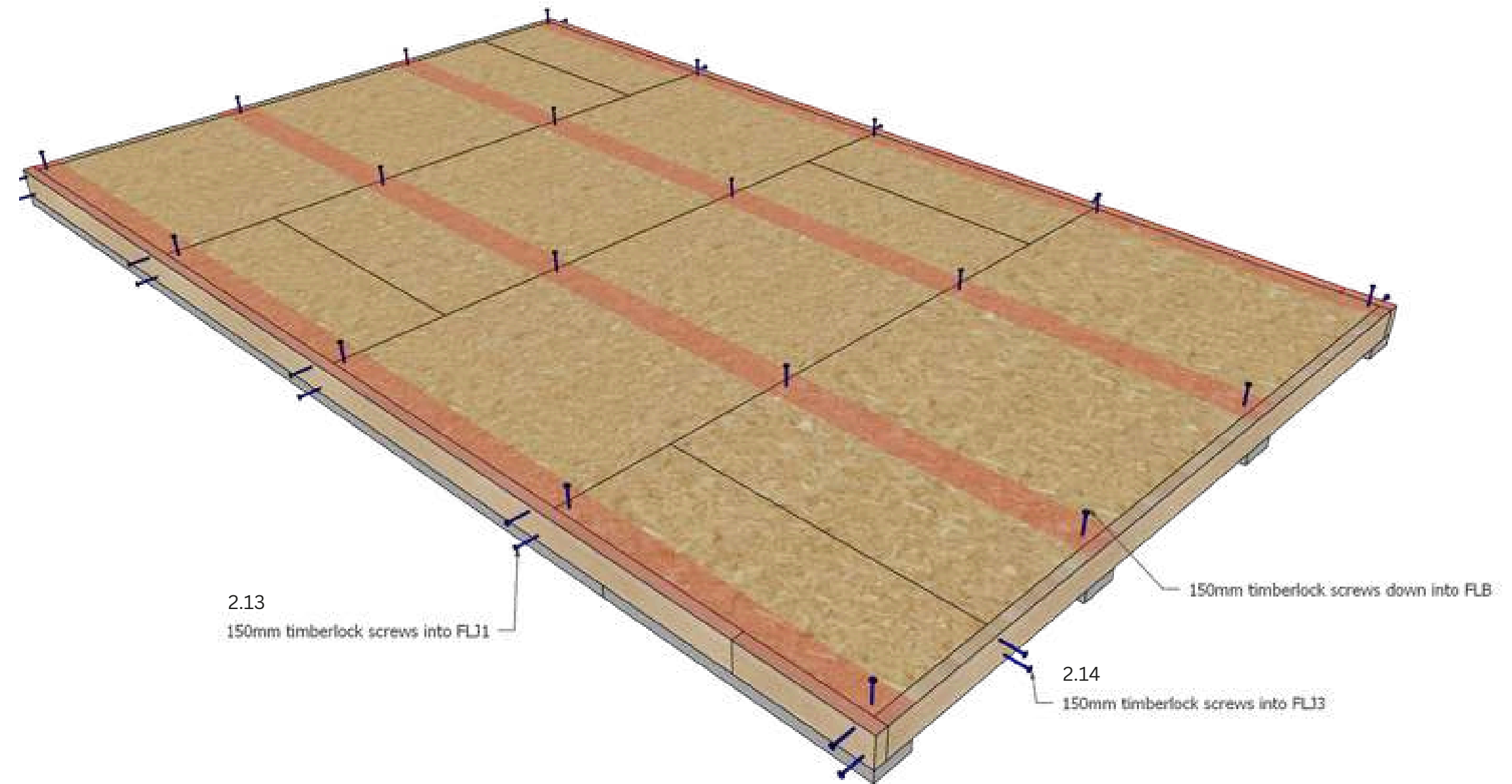
Parts- FLC1, FLC1a, FLC1b, FLC2, FLC2a, FLC2b

2.13 Using 150mm timberlock screws fix though the FLC1 /FLC2's into the FLJ1, FLJ2 and FLJ3's (this is in line with all panel joins.)

2.14 With 150mm timber lock screws fix FLC1 to FLC2

2.15 Locate the FLB's and fix down though the SIP panel into the Floor bearers

Figure 10 - Fixing the ring beam



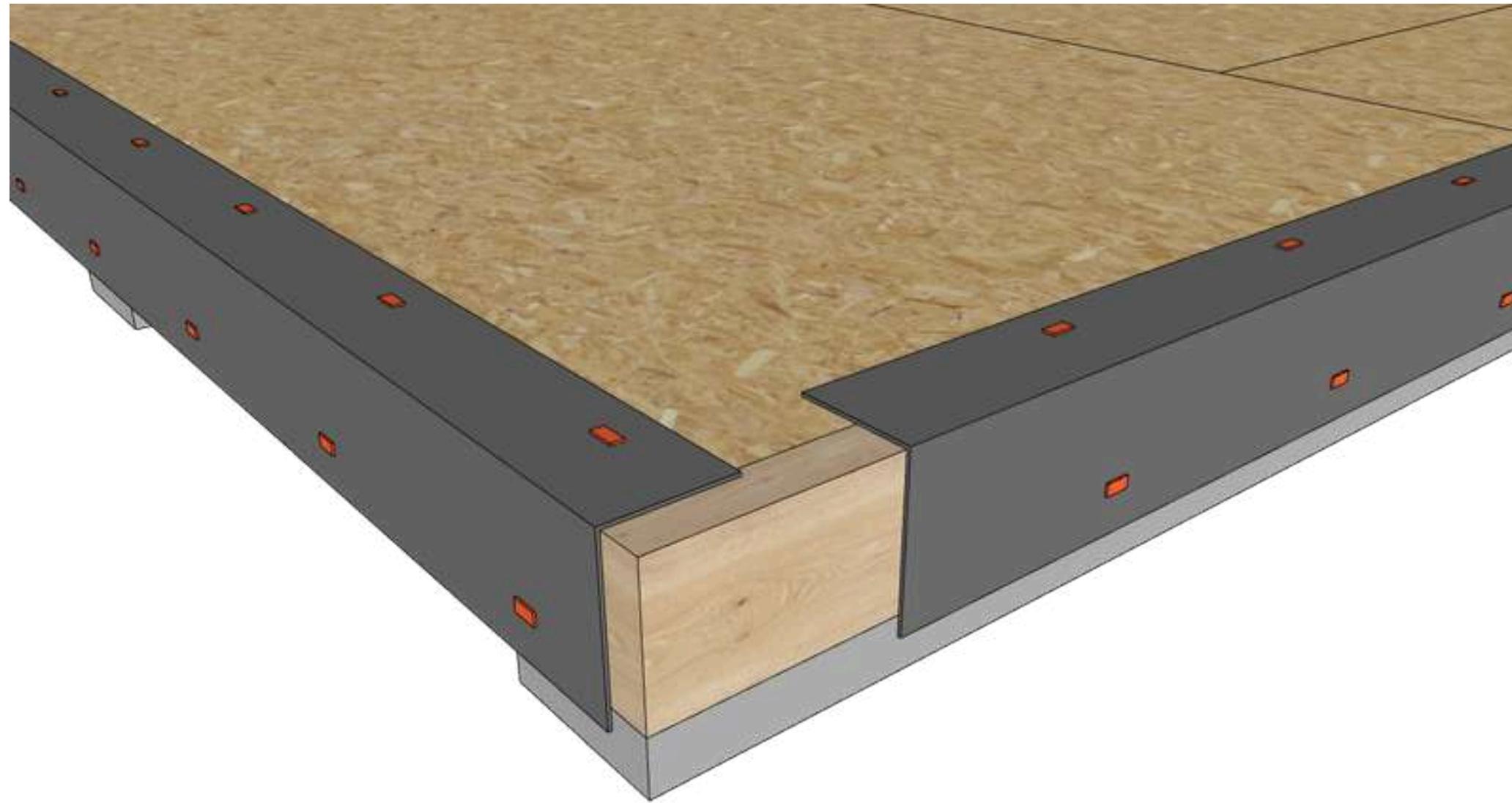
STEP 3 – DPC

Parts – DPC Sheet

3.1 Once all floor panels have been positioned and fixed, take the roll of 220mm DPC and wrap around the perimeter of the floor.

3.2 With the 220mm roll of DPC. Staple this to the edge of the floor and fold over edge and staple to front of ring beam. Run this full perimeter of floor.

Figure 11 – Fitting the DPC



STEP 3 – SOLE PLATE

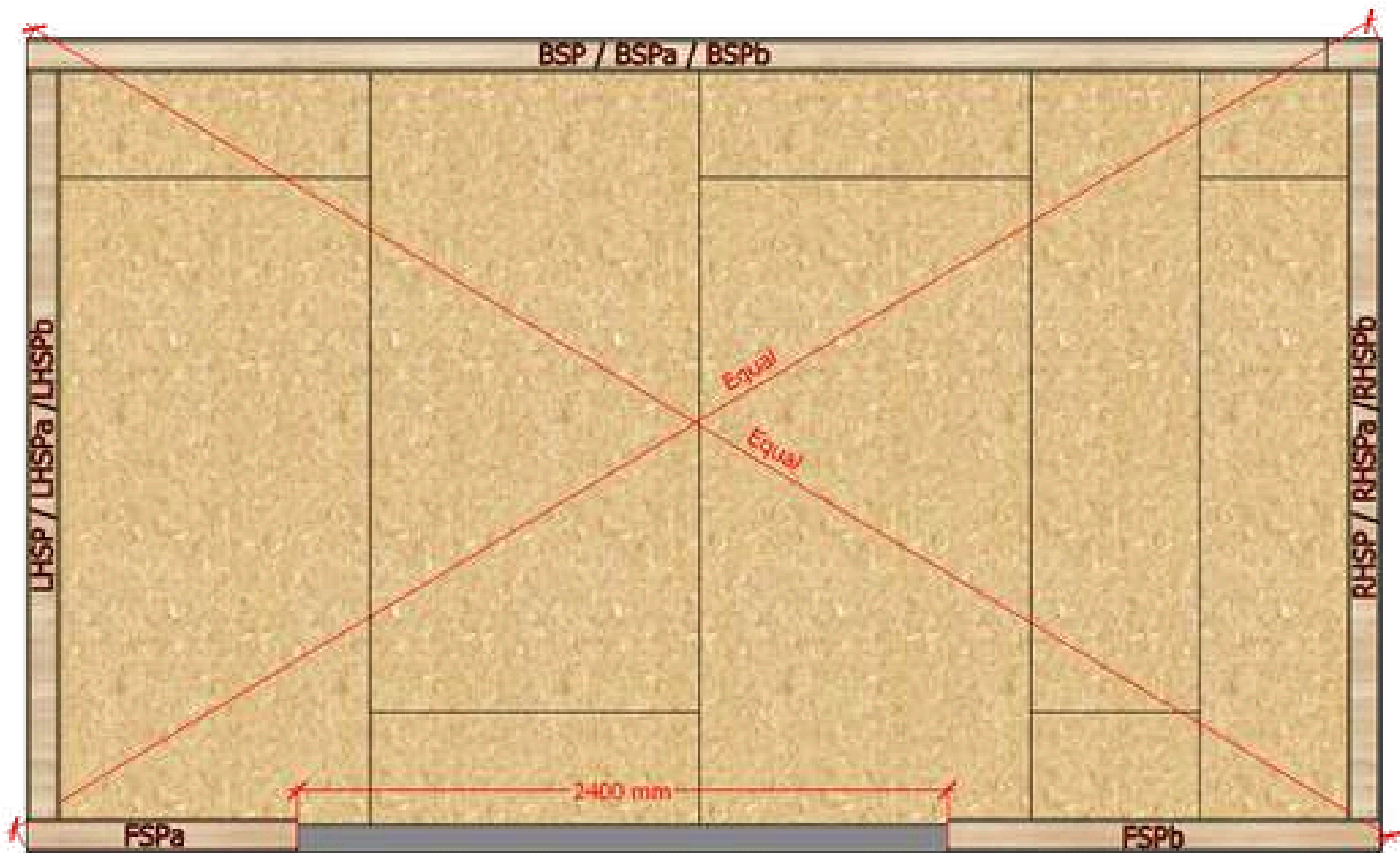
Parts– FSP, FSPa, FSPb, LHSP, LHSPa, LHSPb, BSP, BSPa, BSPb, RHSP, RHSPa, RHSPb

3.3 Next step is to set out the sole plates for the wall panels to sit on and you will need to refer to your sole plate plan to confirm timbers and positions.

3.4 Locate and position Sole plate parts. Align front sole plate OSB side down to floor and align front and side edge to edge of floor ringbeam.

3.5 Position all Sole plates around full perimeter of building and check dimensions corner to corner, and opening width of apertures against provided drawings.

Figure 12- Sole Plate layout

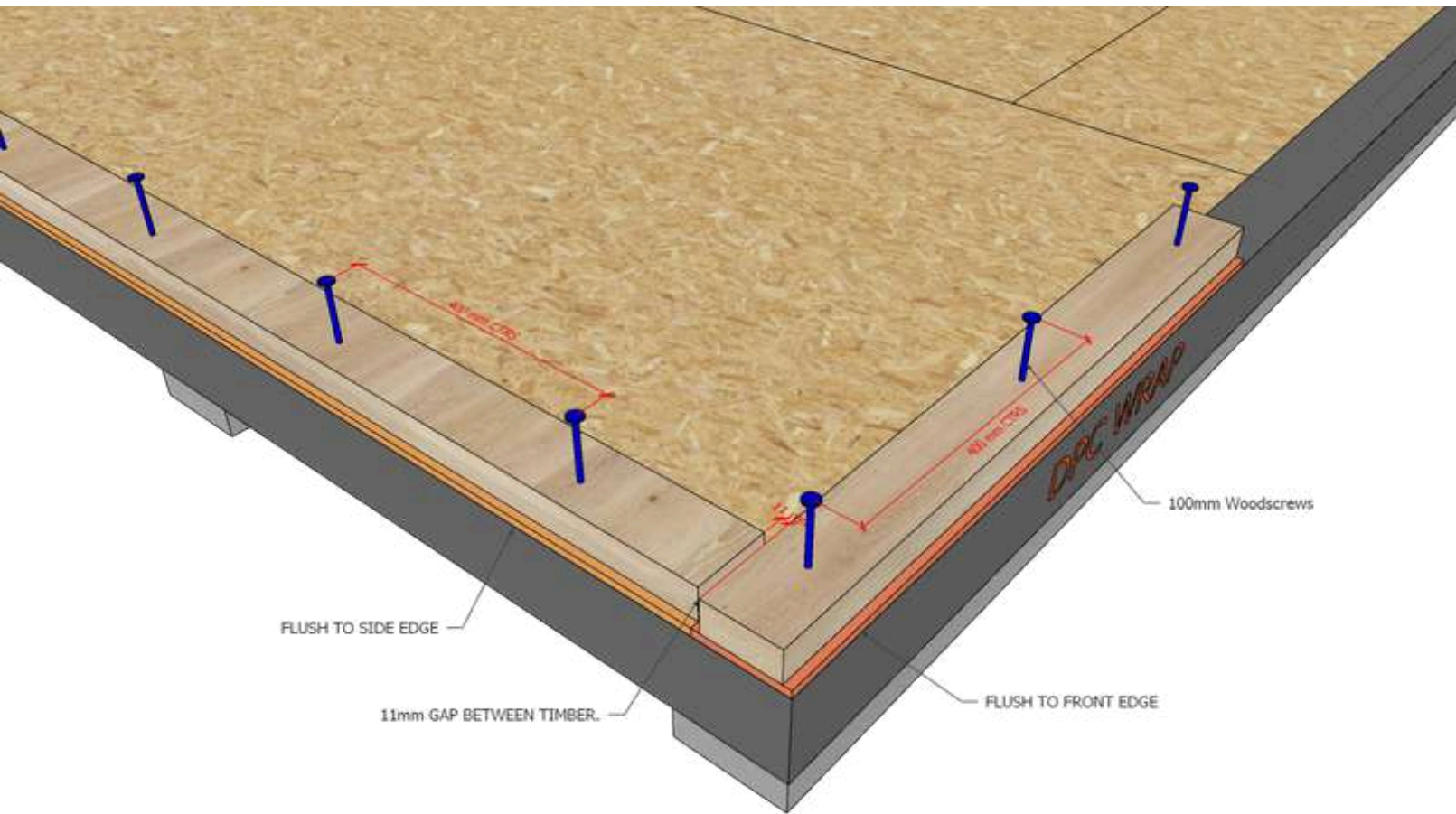


3.6 Once measurements are correct and equal, fix sole plate to floor structure with 100mm woodscrews at 300 ctrs around full perimeter

Note 11mm gap between timber of sole plate as shown- the OSB base will touch to each other. Ensure OSB edge is flush to floor structure.

Setting out of the sole plates is a critical step in the success of your build to ensure all walls align correctly with the floor and roof.

Figure 13 - Sole Plate fixing positions



STEP 4 - WALLS

Parts- CP2, FR1, FR2, LH1, LH2, B1, B2, RH1, RH2, FC, LHC, RHC, BC, FTP, FTPa, FTPb, LHTP, LHTPa, LHTPb, RHTP, RHTPa, RHTPb, BTP, BTPa, BTPb, FR, FRa, FP, LT, WT, DT, ISP, ISPa, ISPb

4.1 You're now ready to start assembling the walls of your garden room. We generally recommend starting at the rear left corner if facing the front of the room) although this doesn't always work in all locations and according to how your doors are positioned.

4.2 Run a small bead of expanding foam along the sole plate to width of first panel.

4.3 Position the panel rebate over the sole plate ensuring the panel is seated properly.

4.4 Foam and then position BC (back capping) into the first panel and fix into place with 35mm wood screws and 300 centres on both sides of the panel. **Someone will need to hold the first panel as you do this.**

Note - this timber will end flush with insulation rebate on top of panel.

4.5 Ensure that the first panel and BC are flush to end of the sole plate and fix in place through the base of the panel with 35mm woodscrews at 300mm ctrs.

4.6 Locate the side wall capping LHC (or RHC depending on your starting position) and fix to first panel ensuring a 11mm gap is left between the timber and OSB edge. This 11mm is for the adjoining panel rebate that ensures the panels are flush to the edge.

Take Care when lifting heavy panels, following Safe Manual Handling Guidance.

Figure 14 - Installing first wall panel

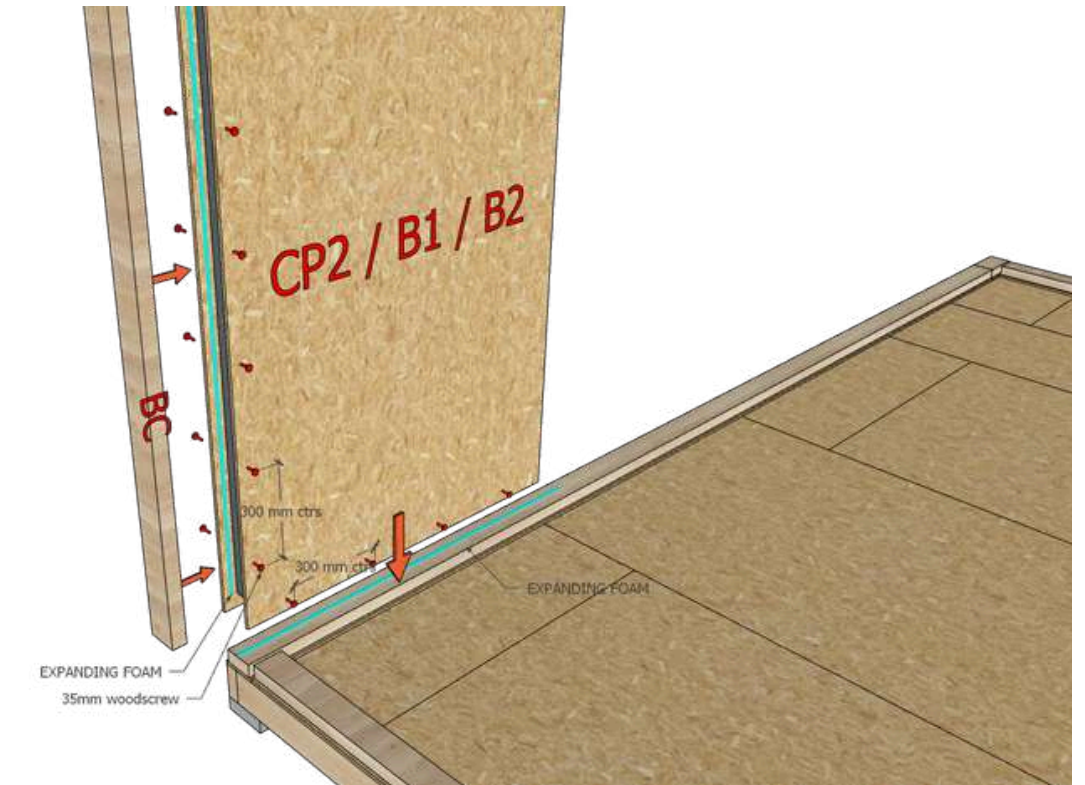
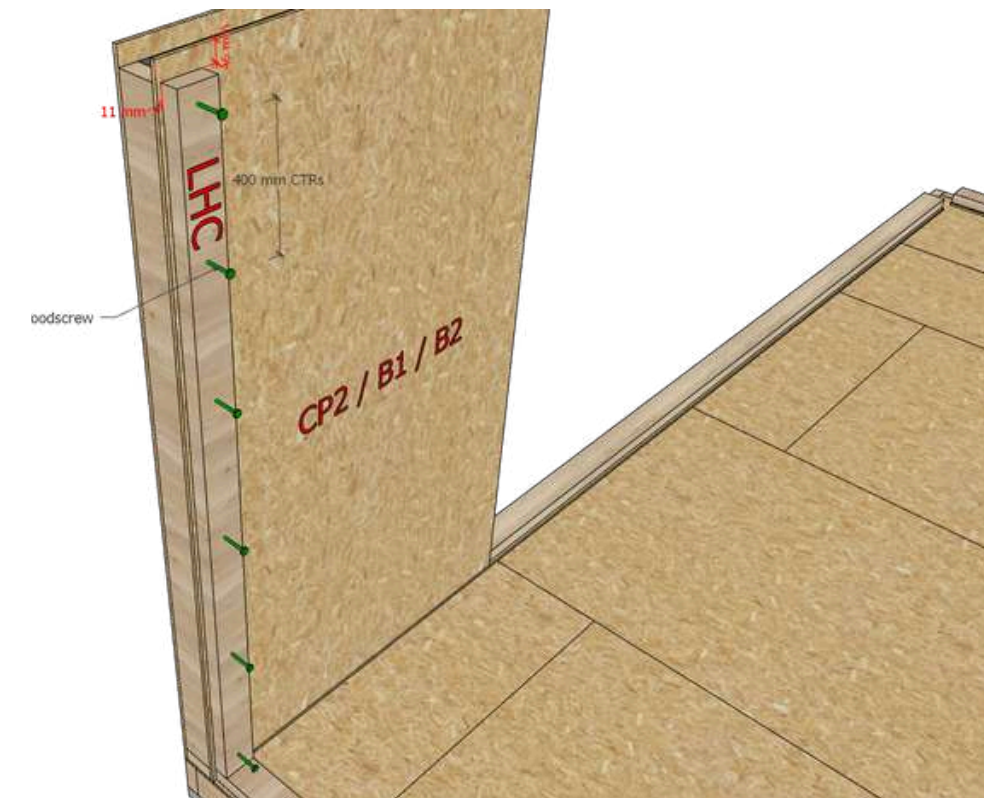


Figure 15 - Fixing first wall panel



STEP 4 – WALLS

Parts– CP2, FR1, FR2, LH1, LH2, B1, B2, RH1, RH2, FC, LHC, RHC, BC, FTP, FTPa, FTPb, LHTP, LHTPa, LHTPb, RHTP, RHTPa, RHTPb, BTP, BTPa, BTPb, FR, FRa, FP, LT, WT, DT, ISP, ISPa, ISPb

4.7 Locate adjoining side wall panel and run a bead of expanding foam into the panel rebate and position onto LHC.

4.8 Ensure all gaps are closed and both panels are vertical before fixing the side wall panel to LHC and LHSP with 35mm woodscrews both inside and out.

4.9 Apply expanding foam to the panel rebate and insert ISP into the rebate. Ensure ISP is fully inserted before fixing into place with 35mm woodscrews internally and externally at 300mm ctrs.

Note - depending on your design, this configuration may vary but the principle remains - all joints to be foamed and screwed.

Take Care when lifting heavy panels, following Safe Manual Handling Guidance.

Figure 16 – Installing first side panel

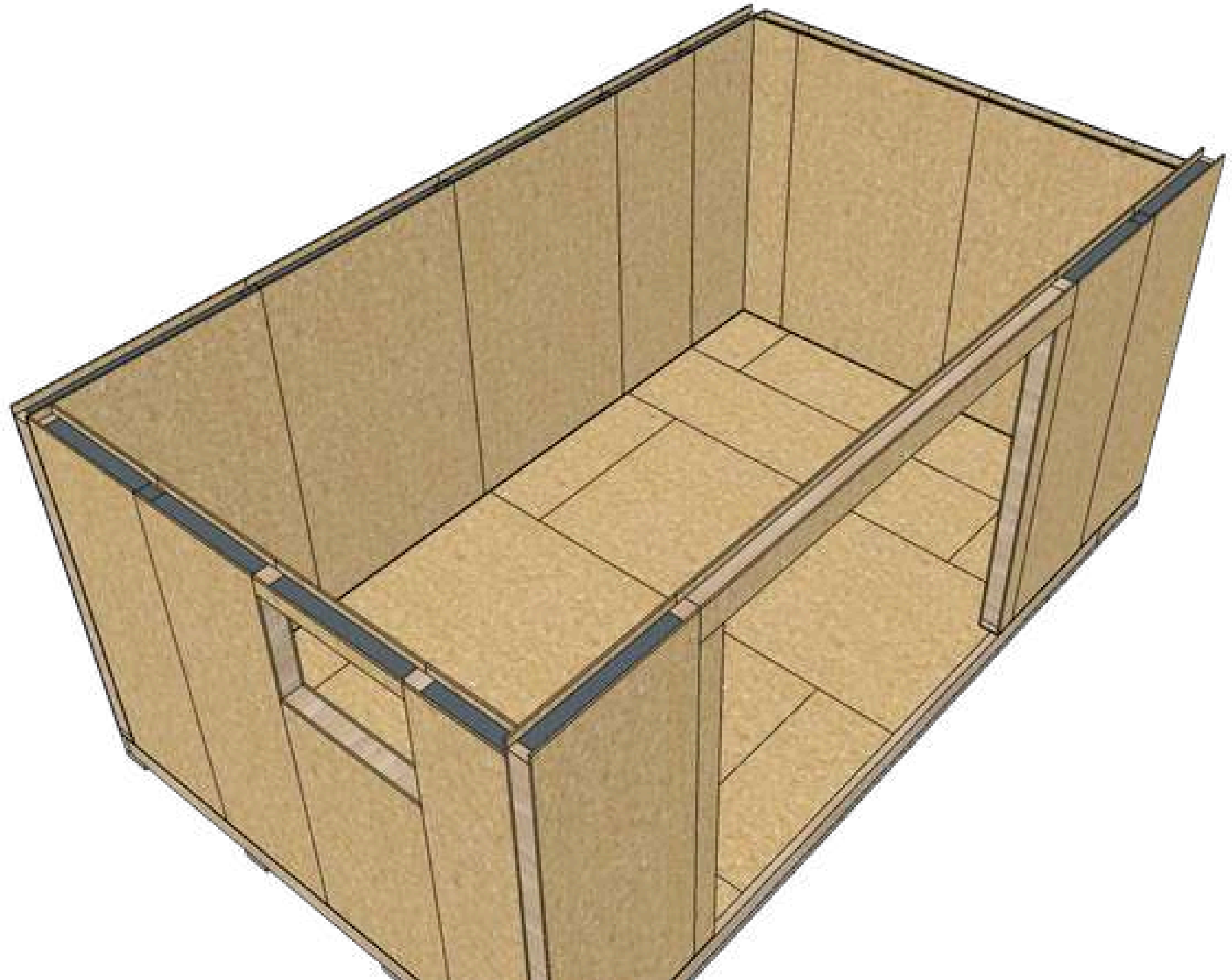


STEP 4 - WALLS

4.10 Repeat the process of fixing panels until all panels are fixed in accordance with your drawings.

4.11 Ensure you are plumb and level, especially at corners, and that you apply sufficient foam to panel edges.

Figure 17. - completed wall panel installation



Note - If your room has a panel arrangement that does not allow you to start at the corner as recommended, or if the wall feels unstable, use temporary timbers to secure panels in plumb position so that you can continue to work safely.

STEP 5 – LINTELS & APERTURES

Parts– FP, LT, DT, DTJ, WT, WTJ

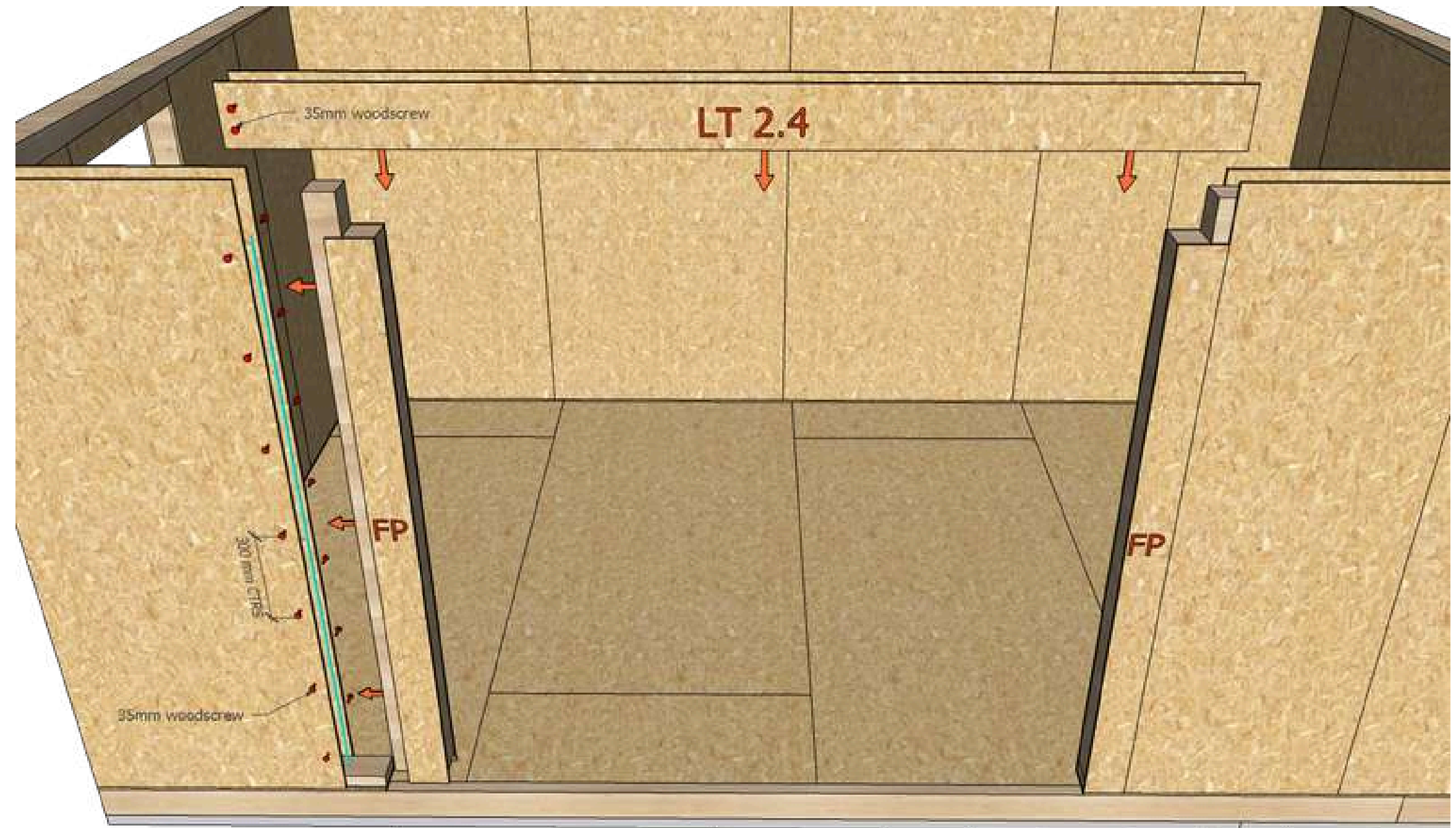
Door Lintels

5.1 Apply expanding foam to panel rebate and insert pillar (FP) . Once inserted check for plumb with a spirit level and secure into place with 35mm woodscrews at 300mm centres internally and externally.

5.2 Repeat to opposite side of aperture.

5.3 With both pillars in place, lower the Lintel (LT) onto the pillars and secure to FP with 35mm woodscrews internally and externally at both ends of lintel.

Figure 18 – Door Lintel installation



STEP 5 – LINTELS & APERTURES

Parts– FP, LT, DT, DTJ, WT,

Window Lintels

5.4 Apply expanding foam to panel rebate and insert window trim joiner (WTJ) into the adjacent panel rebate. Secure in position with 35mm woodscrews both internally and externally.

5.4 Insert below window panel as per standard and secure in place with 35mm woodscrews.

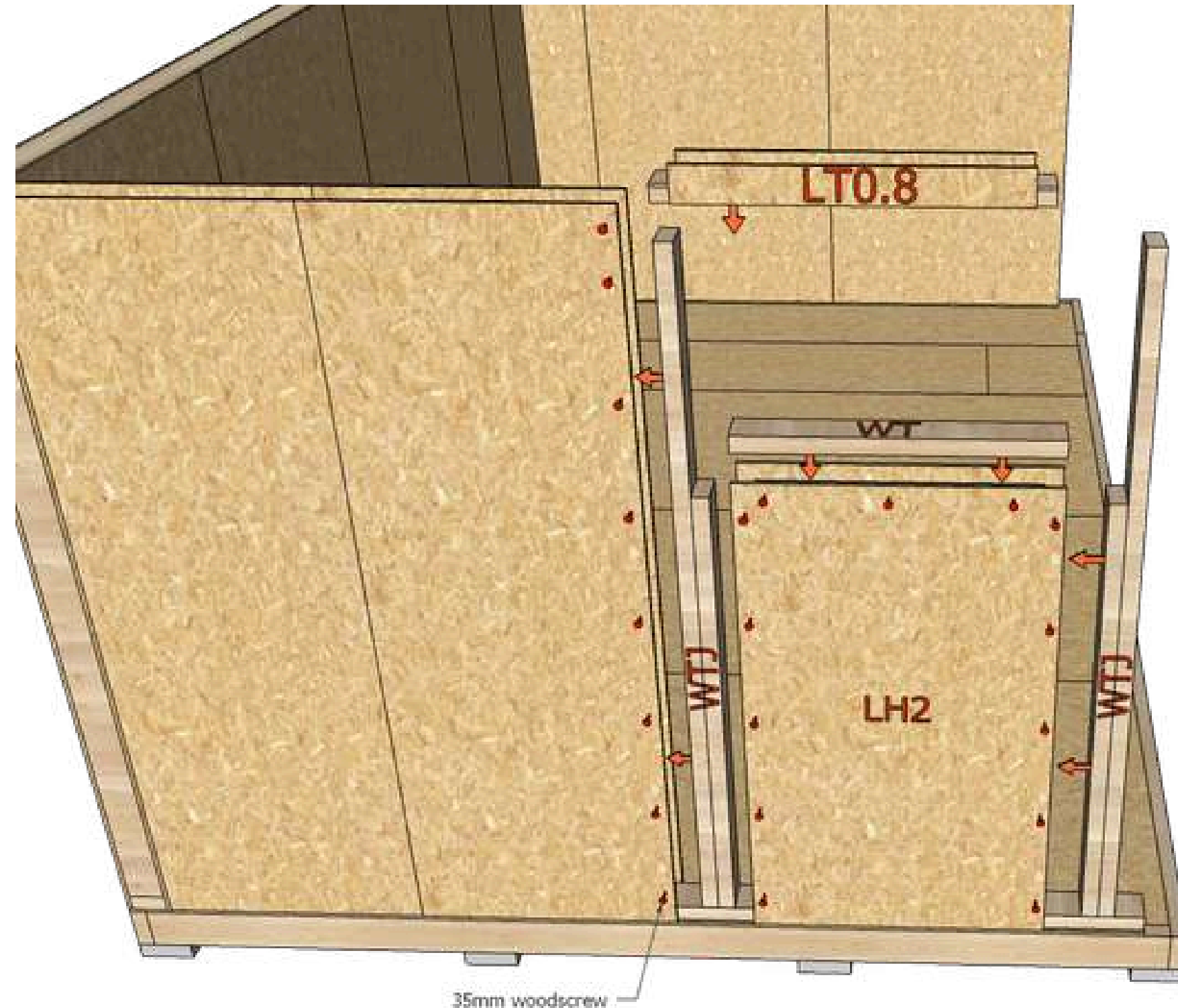
5.5 Insert next window trim joiner into panel rebate.

5.6 Foam and insert window trim (WT) into the top of the window panel. This acts as the window sill.

5.7 Fix into place with 35mm woodscrews both sides of panel.

5.8 Position window lintel onto top of both WTJ's and fix into place with 35mm woodscrews.

Figure 19 – Window Lintel installation



STEP 6 – TOP PLATES & FIRTINGS

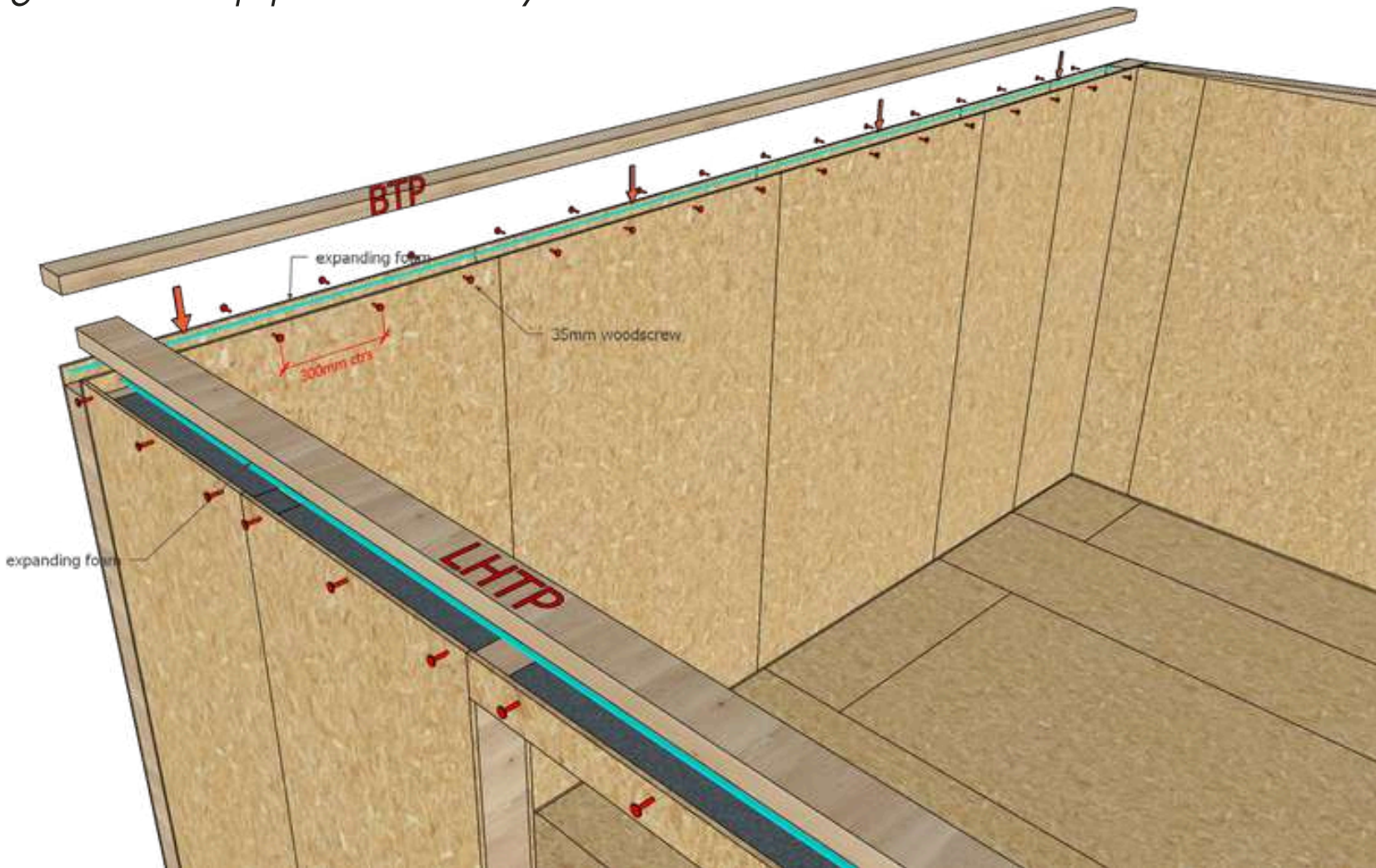
Parts- FR, FRTP, FRTPa, FRTPb, LHTP, LHTPa, LHTPb, RHTP, RHTPa, RHTPb, BSP, BSPa, BSPb, FSP, FSPa, FSPb

6.1 This is the final step to complete installation of the walls for your garden room. In this step you will insert the top plate onto the grooves on the top of the plate and fix furring strips onto the finished side walls.

6.2 With all wall panels standing run a bead of expanding foam into top panel rebate and insert relevant top plate BTP, RHTP,LHTP, FRTP into the panel rebate.

5.3 Secure in place with 35mm woodscrews both internally and externally.

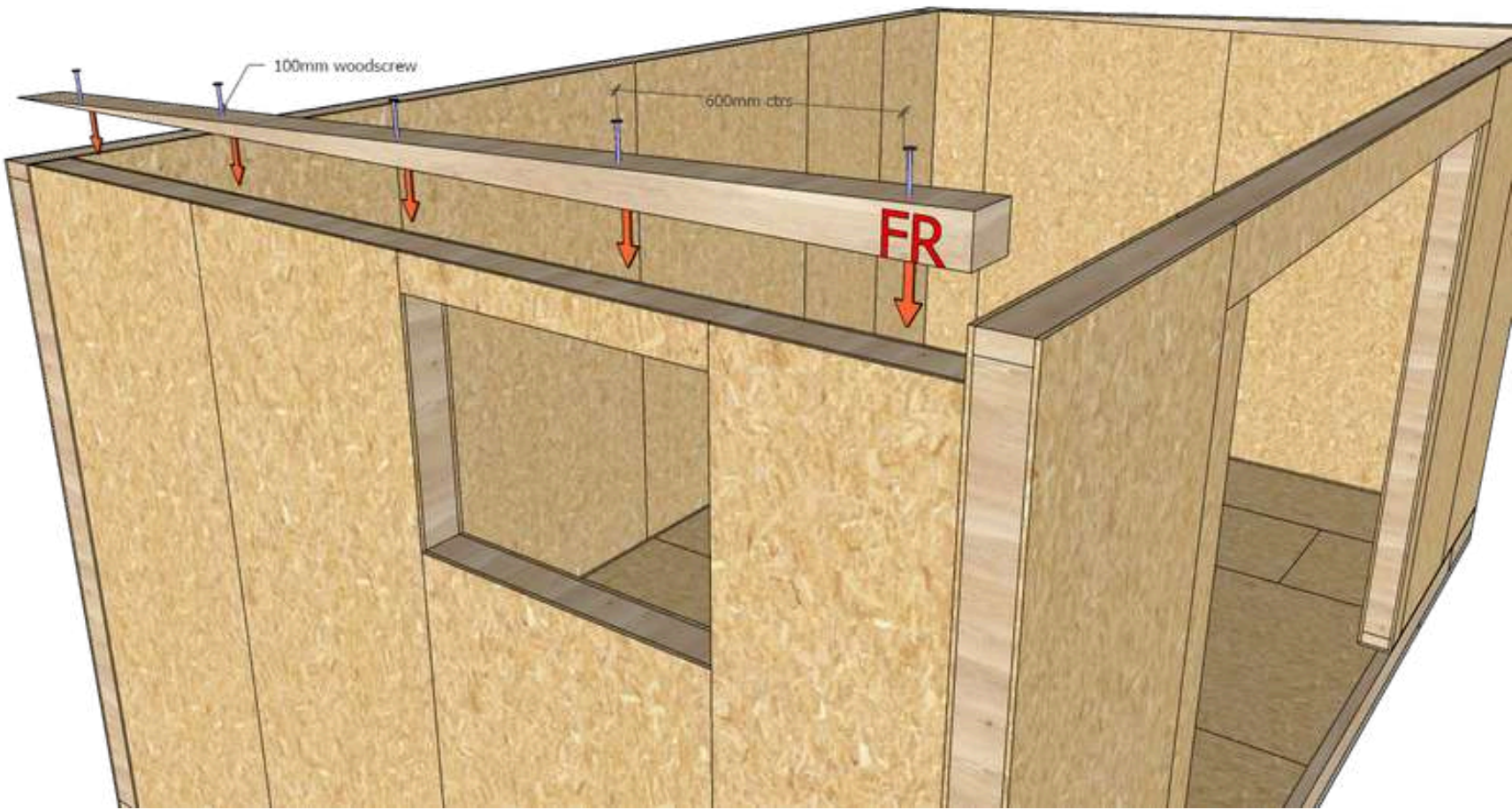
Figure 20 – Top plate assembly



5.4 Once the top plates are fixed into place, position your wall firings (FR) onto the top of the side walls, ensuring the timber is flush both internally and externally to walls.

6.5 Fix down to top plates with 100mm wood screws at 600mm centres.

Figure 21 – Furring installation



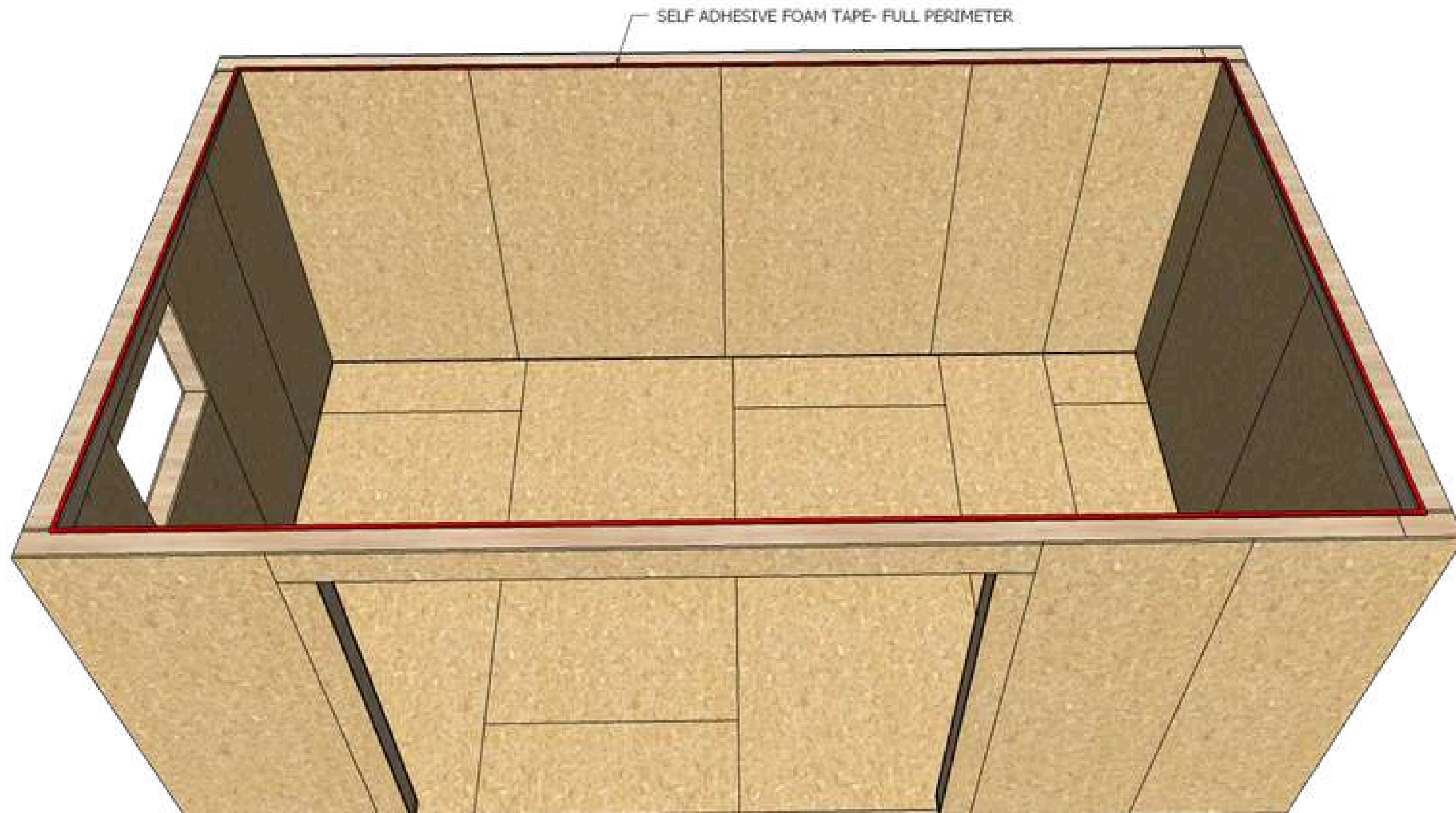
NOTE - If your side panels are angle cut (Classic specification), you don't require furring strips.

STEP 7 – COMPOSITE ROOF

Parts-CR1, CR2, CR3

7.1 Before starting the roof installation, with walls, top plate and firing fixed, run a strip of self adhesive foam tape along the top of wall panels and secure down as shown by the red line below in Figure 16.

Figure 22 – Preparing structure for roof installation



STEP 7 – COMPOSITE ROOF

Parts-CR1, CR2, CR3

Before you start this step, please ensure you have suitable access and the correct PPE. This step involves working at height and lifting. Ensure adequate assistance is available for these tasks.

7.2 Position the first roof panel (CR1). The first panel is the roof panel without the overpanel lip.

7.3 Using 150mm gash point screws and caps, temporarily secure into place front and back. Fixing down through roof panel into the wall top plate.

Note- the back insulation edge should be flush with wall with 450mm overlap to the front edge for Studio, Haven, Executive and Diplomat.

The 75mm of metal extending past the back wall is the gutter drip edge. You will add more fixings later.

Figure 23 – Installing first composite roof panels



STEP 7 – COMPOSITE ROOF

Parts-CR1, CR2, CR3

7.4 Locate the adjacent roof panel CR1 / CR2 and lower into place ensuring the lip edge laps over the first panel as shown.

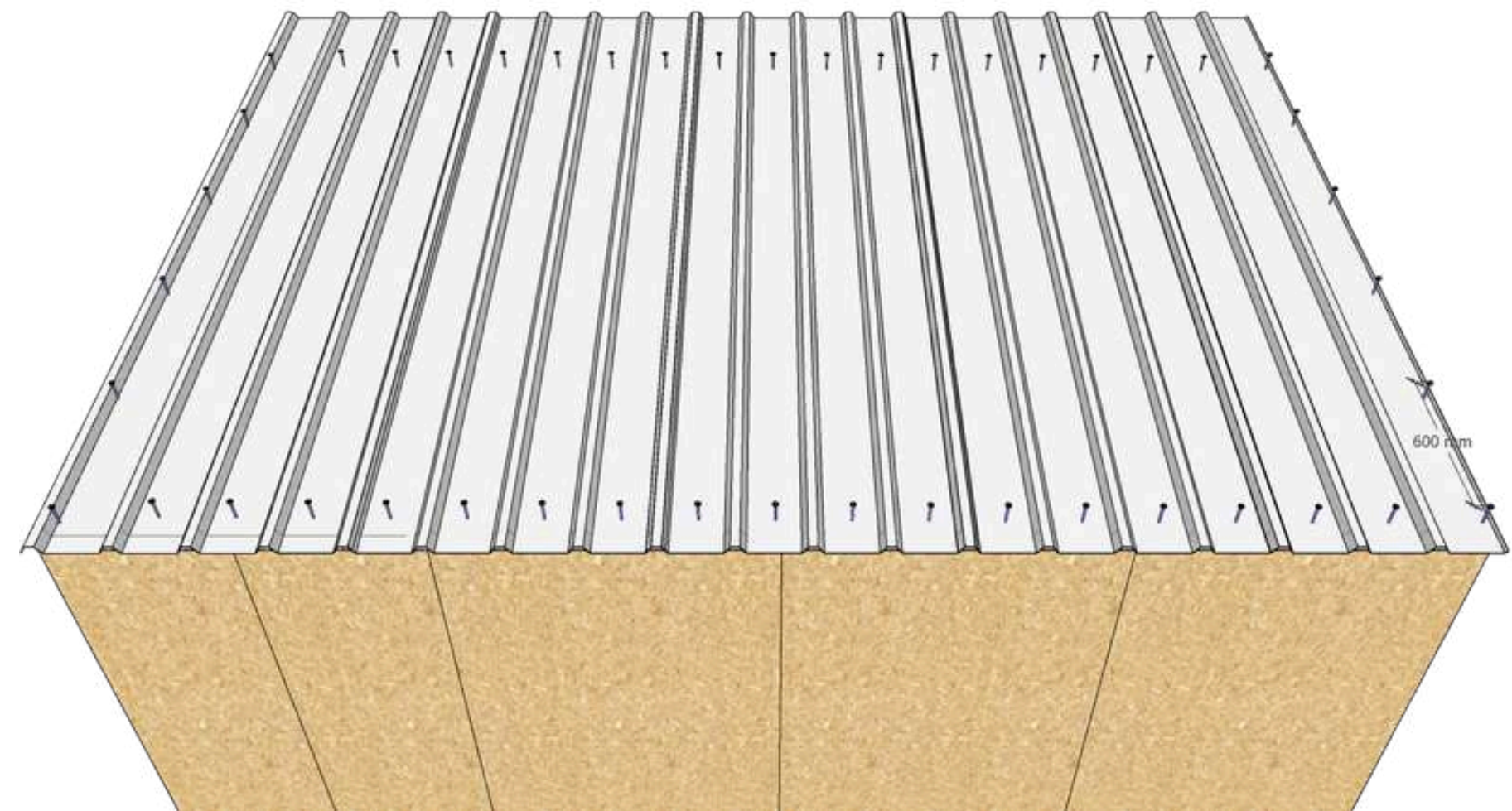
7.5 Ensure back edge is flush to first panel and back wall.

Figure 24 – Composite panel overlap



7.6 With all roof panels in place and all edges flush or correctly overhanging, fix panels into place using 150mm gash point hex head screws with caps @ 600mm centres along the left and right wall and in the valley of panels along front and back edge, ensuring you hit solid timber top plates.

Figure 25 – Roof panels in place



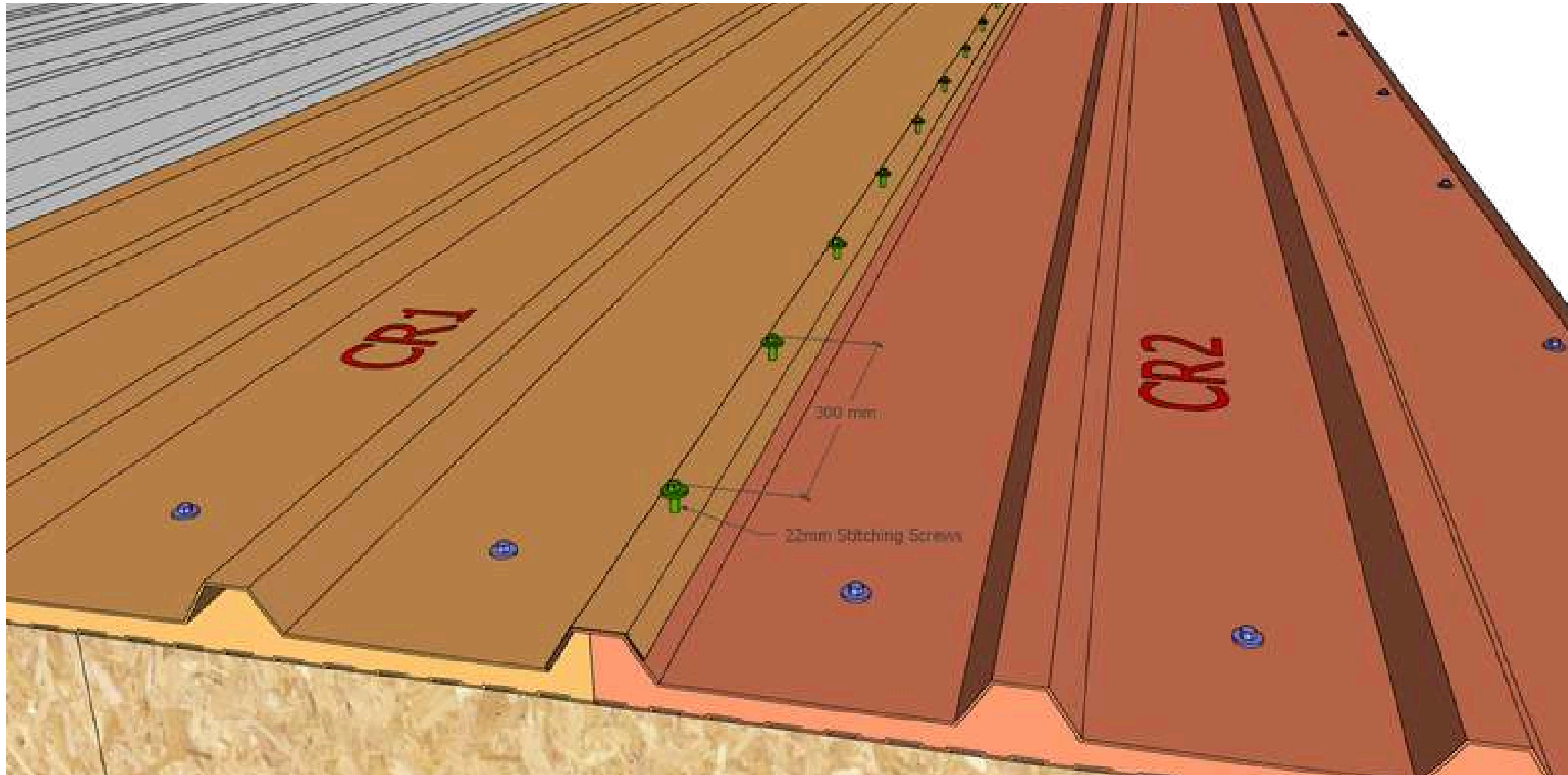
STEP 7 – COMPOSITE ROOF

Parts-CR1, CR2, CR3

7.7 With the outer edge fixings done- fix the panel lip edge to the receiving panel with the 22mm stitching screws + caps @ 300mm ctrs.

Note- this is not every rib, just where panel overlaps to adjacent panel.

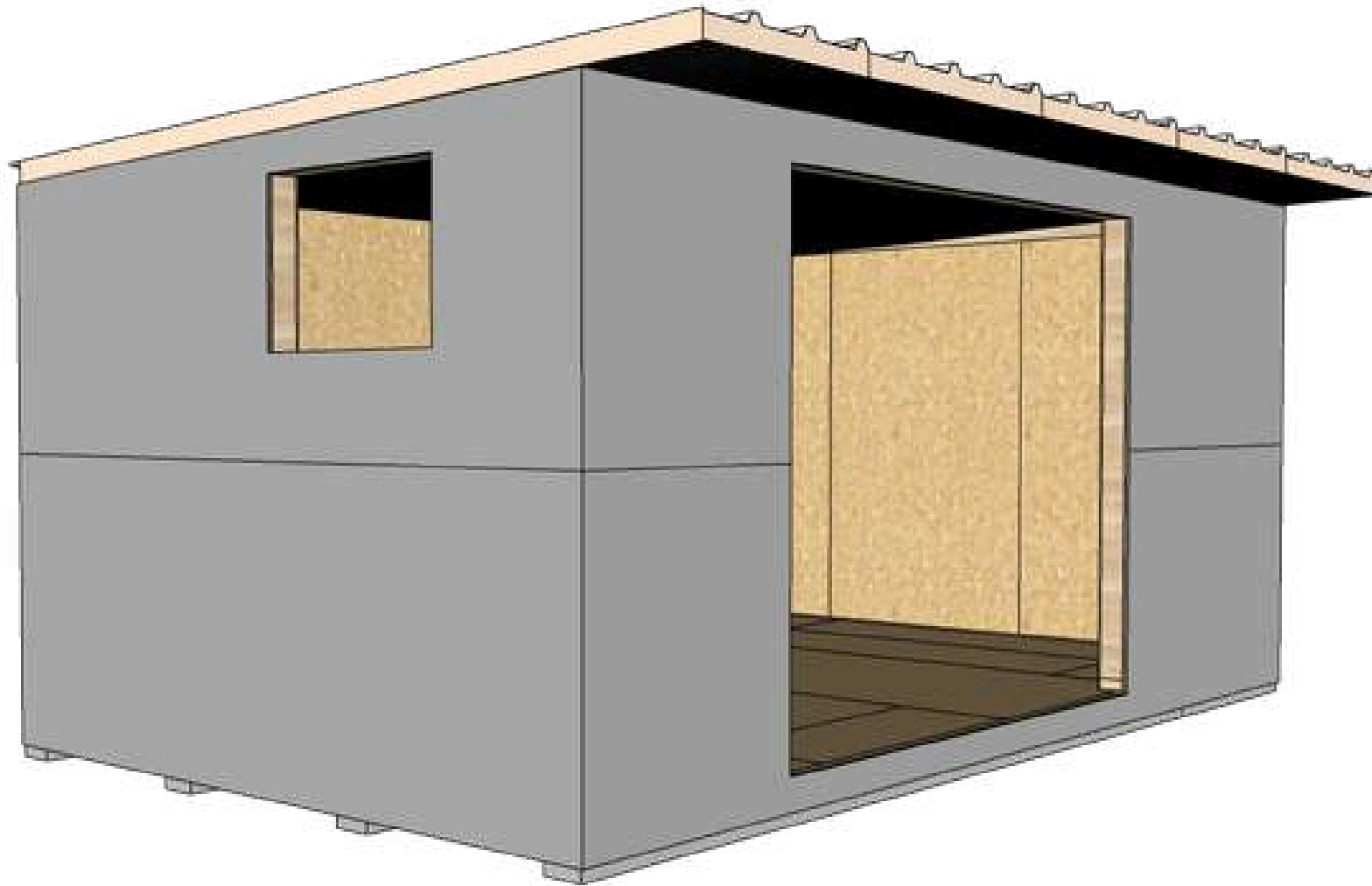
Figure 26 – Final fixings to roof.



STEP 8 – BREATHER MEMBRANE, BATTEN & SOFFIT

8.1 Wrap and staple the whole building with breather membrane, ensuring all corners and folds into any aperture reveals are covered.

Figure 27- Breather membrane



Note - Apply horizontal battens for vertical hung cladding and vertical battens for horizontal cladding.

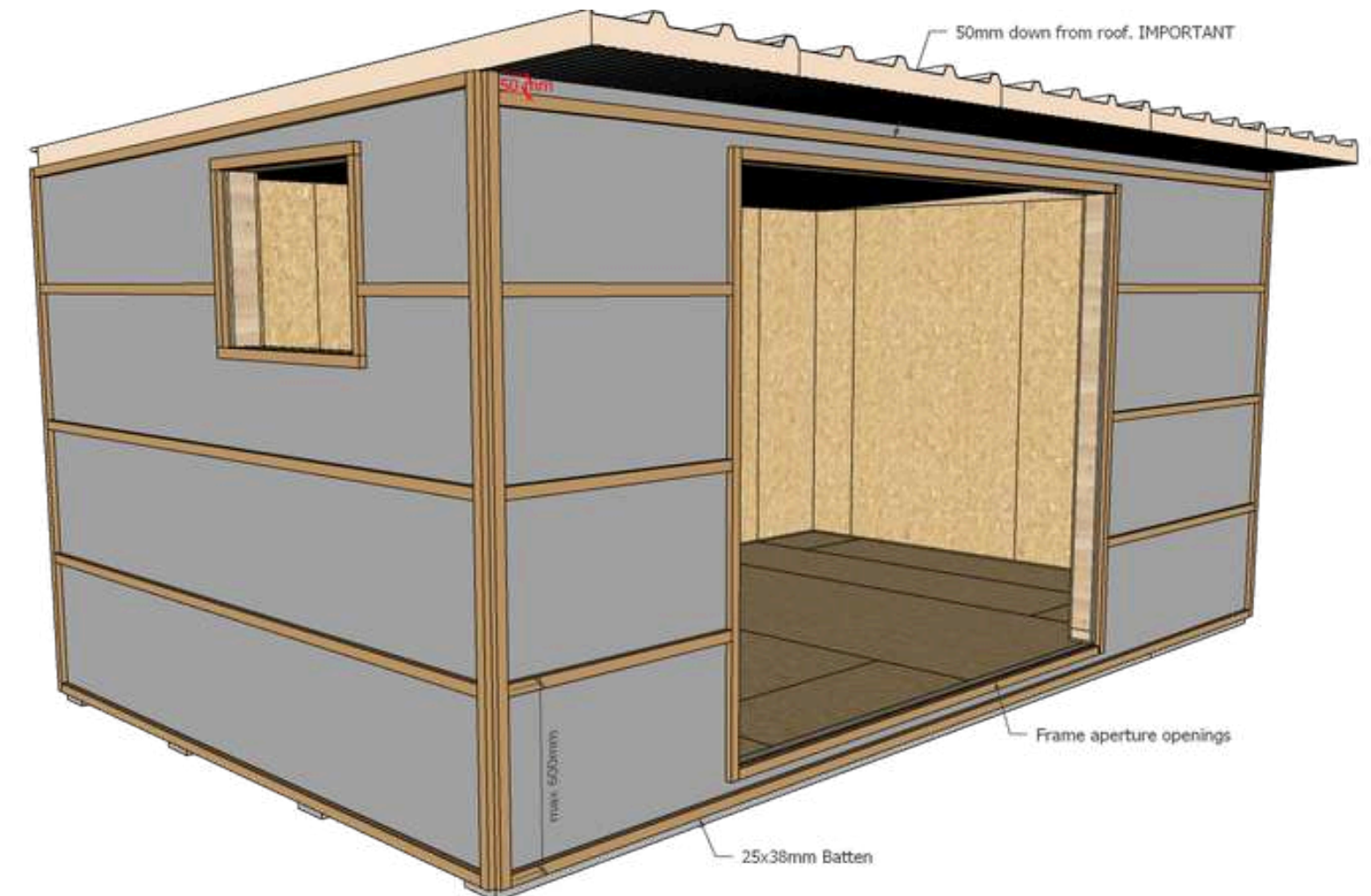
8.2 Batten supplied with your kit will need to be cut to the lengths required.

8.3 Fix cladding batten to all walls, max spacing 600mm fixed with 50mm screws.

8.4 Frame all window apertures horizontally and vertically.

8.5 With overhanging roof, ensure front top batten is dropped down 50mm from top edge to allow for soffit batten.

Figure 28 - Batten application

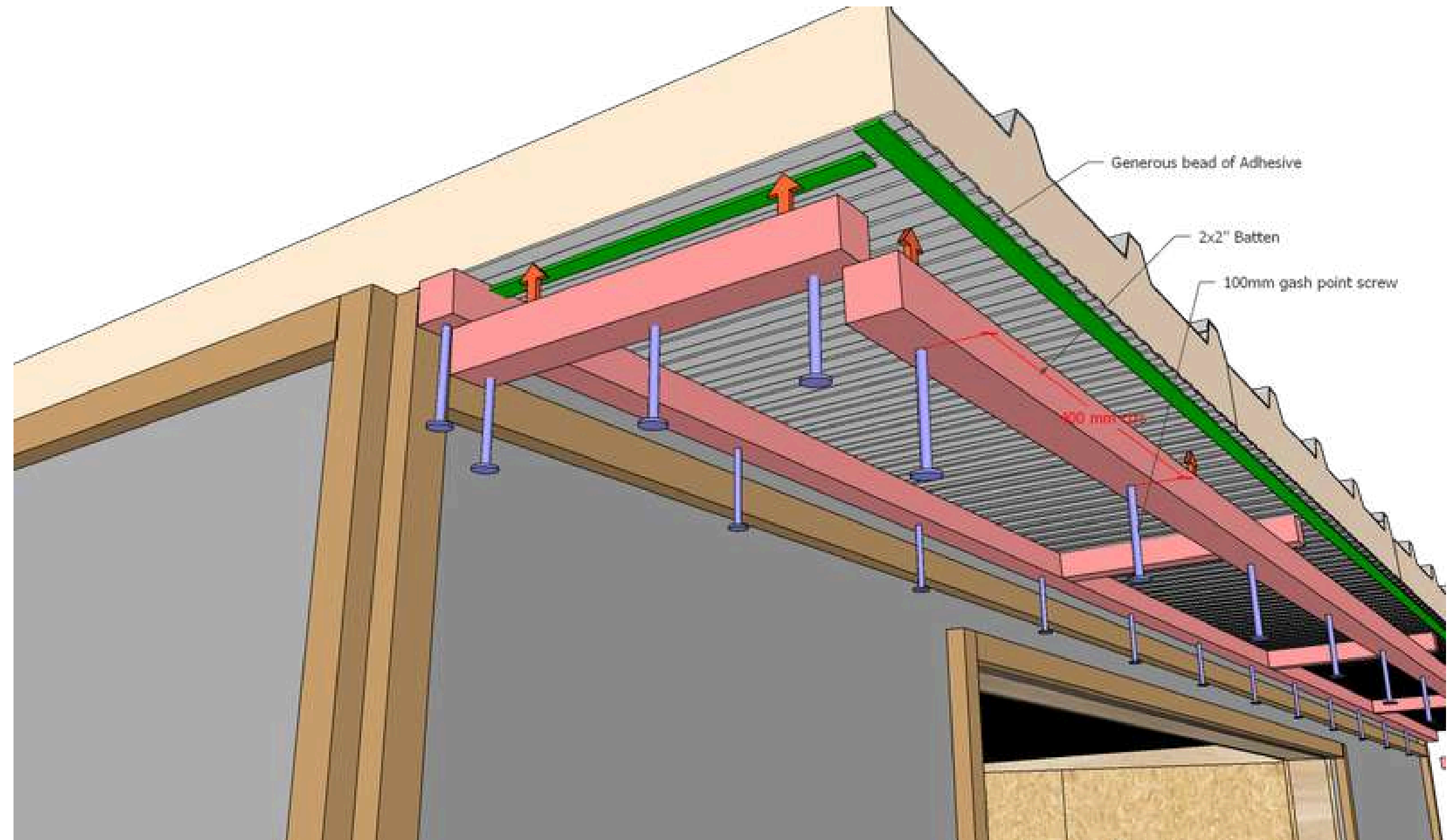


STEP 8 – BREATHER MEMBRANE, BATTEN & SOFFIT

8.5 Using the 2x2" batten, apply a generous bead of adhesive to batten or roof face and screw batten to roof using 80mm screws from underside up at 400 centres

Note-
Adhesive is Critical.
Screws should not be overtightened.
Ensure glue is fully cured before applying cladding.

Figure 29- Soffit installation



STEP 9 – DOORS & GLAZING

Whether you have sourced your own glazing, or if we have supplied this for you, in order to validate the manufacturer's and our warranty, these will need to be installed by a FENSA registered installer.

As such, we always recommend that you use a local tradesperson who holds this accreditation.

Note that doors and windows often have varying and differing systems and mechanisms, so please familiarise yourself with the product before attempting the installation.

Find a FENSA Approved Installer

Find local window & door installers, request a quote online and relax knowing you'll get a FENSA certificate when the job's done.

www.fensa.org.uk

STEP 10 – CLADDING

10.1 Once all the batten is firmly in place, you can begin to fix your chosen cladding.

10.2 We recommend starting at a corner, then measure and cut your boards to fit. Ensure the board sits flush in the corner.

10.3 Fix each board to the batten using only stainless steels brad nails (included in kit)

10.4 Work your way across the room. We supply an extra 10% of the quantity required of your chosen cladding to allow for any additional cuts/errors.

10.5 For composite cladding please refer to the manufacturers specific guidance

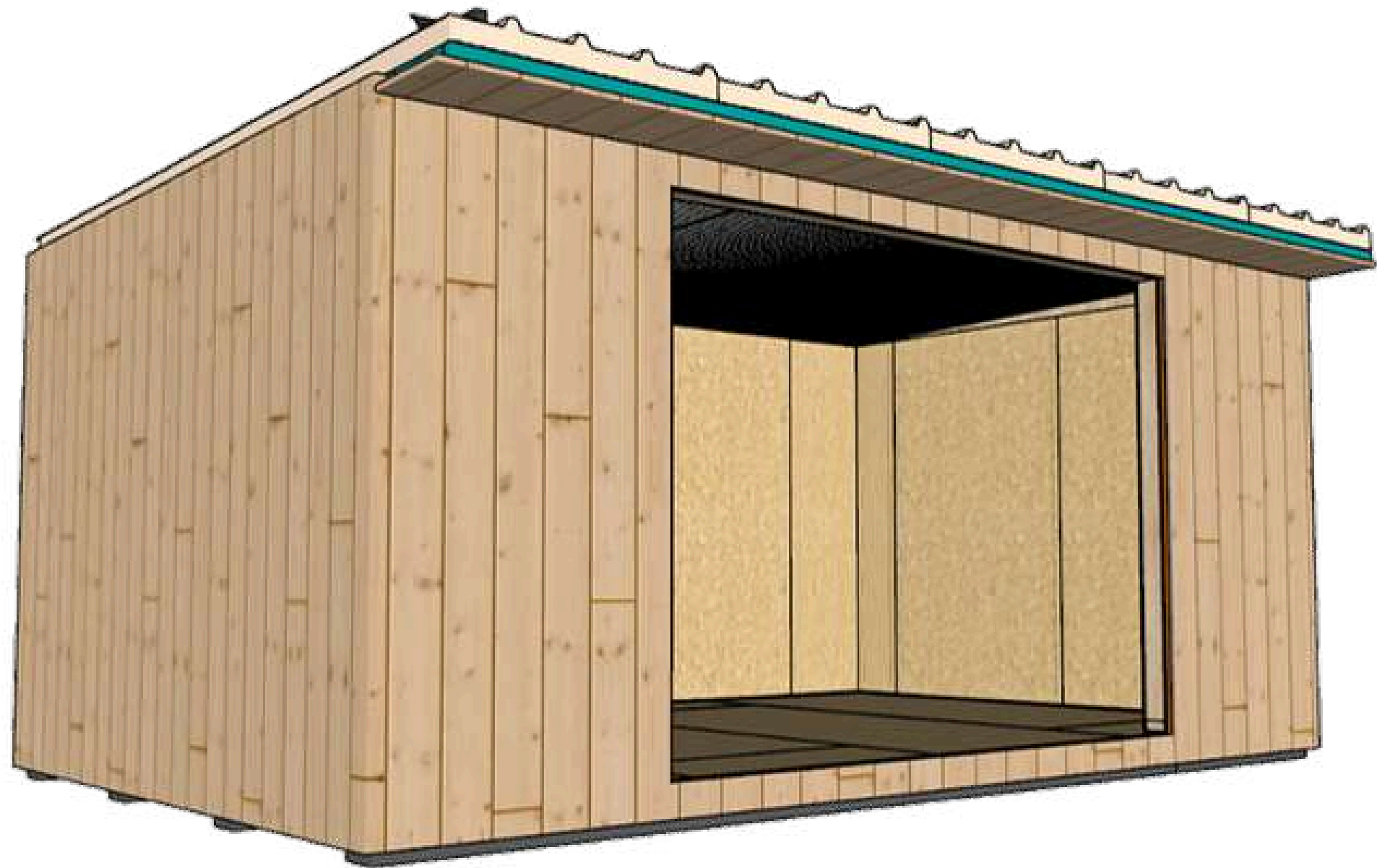
Flat composite:

<https://www.cladco.co.uk/cladding-installation>

Slatted composite:

https://www.cladco.co.uk/media/pdf/slatted_cladding_installation_guide.pdf

Figure 30 – Completed cladding

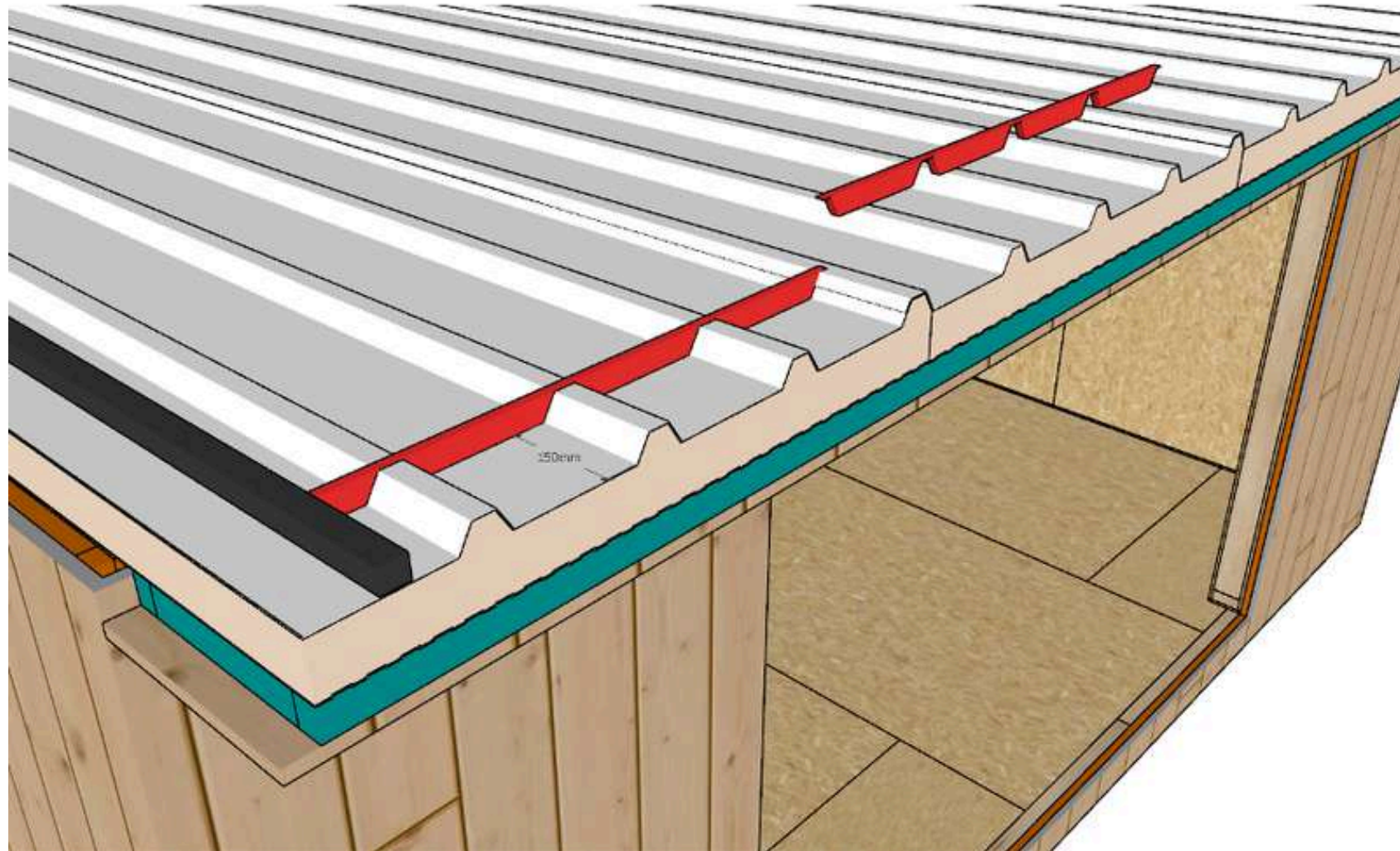


STEP 11 – ROOF FINISHES

11.1 With the cladding done, position the eaves closer foam strip to 150mm off roof leading edge.

11.2 Position the CRT1 metal 90° trim starting on the side wall, ensuring it is pushed hard against the cladding material before fixing with 25mm screws through side face and along roof top.

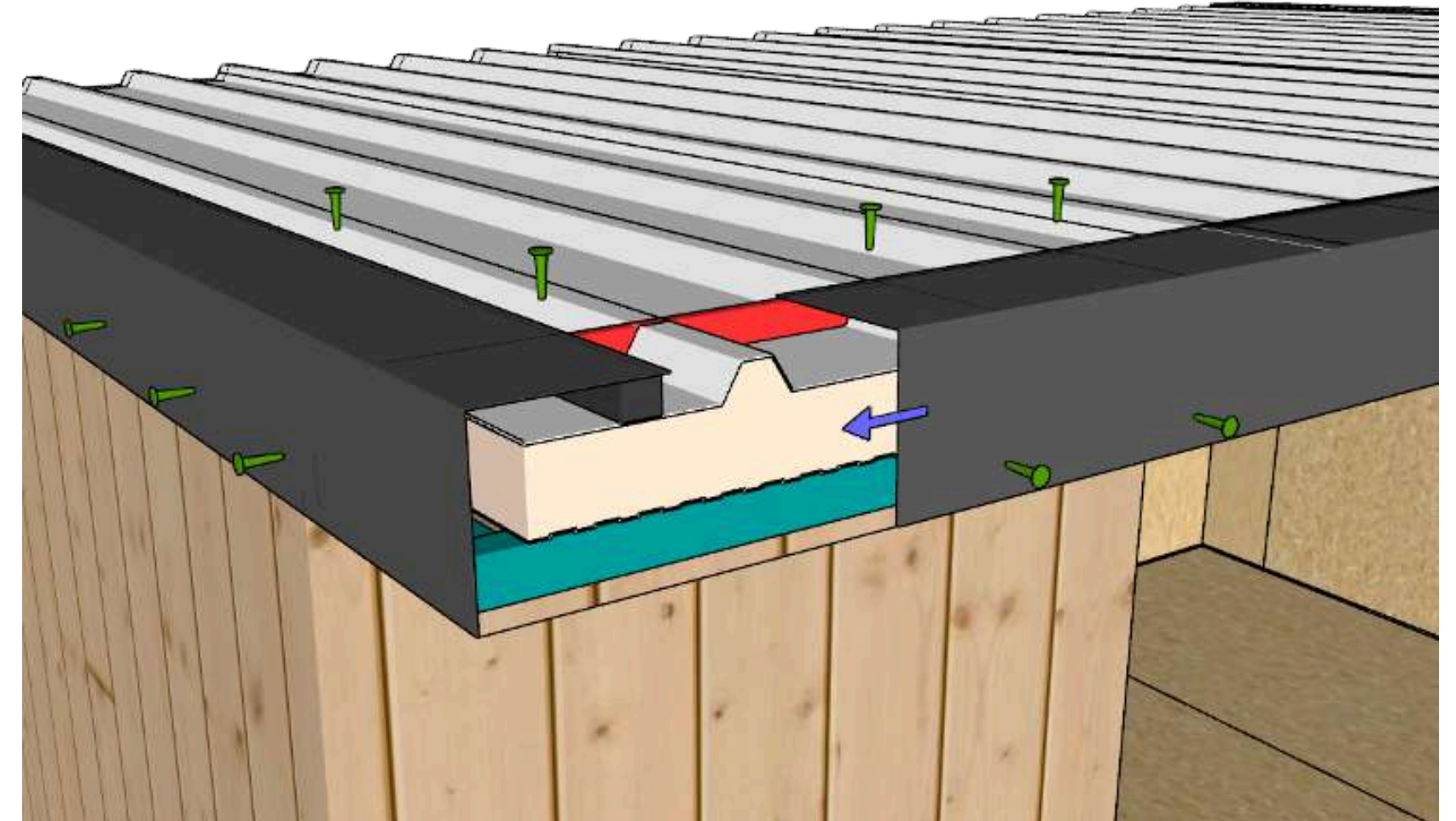
Figure 31 – Fitting the flashing



11.3 Repeat this step for front fascia but ensuring the foam strip is captured by the fascia and screwing down through fascia and foam into roof with 25mm screws every 250mm or on every rib.

11.4 Front fix to soffit batten with 25mm screws and matching colour cap every 600mm max spacing.

Figure 32 – Fitted front flashing



STEP 11 – ROOF FINISHES

Guttering

11.5 Guttering to be installed over top of cladding. Install guttering clips first. Aim for a fall of half an inch per 10ft of gutter length.

Figure 33 – Guttering installation



STEP 12 – INTERNAL FINISHES

We recommend completing your internal fit out in the following sequence of tasks:

1. Batten Internal Walls & Ceiling

- Check all wall and ceiling surfaces are level and suitable for boarding.
- Cut battens to the appropriate length. The batten will run horizontally so this will be equal to the internal dimensions of your room.
- Fix timber battens securely to the wall using 50mm screws at 600mm centres.
- For the ceiling, apply silicone adhesive to the back of the batten. Hold it in place whilst another fixes it to the roof panel with 50mm screws at 600mm centres. Do not fit plasterboard until the silicone has gone off.
- Ensure battens are plumb, level, and provide a solid fixing surface for plasterboard.

2. First Fix Electrics

- At this stage you will need a qualified electrician to fit the first fix electrics for your room.

3. Fit Tapered Edge Plasterboard

- Measure and cut plasterboard sheets to suit each wall and ceiling area.
- Fix tapered edge plasterboard to battens using plasterboard screws, including inside any aperture reveals up to the window/door frame.
- Stagger board joints where possible and ensure boards are firmly secured.
- Tape and fill all joints and screw heads ready for decorating.

STEP 12 – INTERNAL FINISHES

4. Paint Walls & Ceiling

- Ensure all filled joints and surfaces are dry and sanded smooth.
- Remove dust and debris prior to painting.
- Apply white paint supplied, following manufacturer's recommendations.
- Apply additional coats as required to achieve a consistent finish.

5. Install Underlay & Laminate Flooring

- Ensure the floor surface is clean, dry, and level.
- Lay underlay across the entire floor area, trimming neatly around edges.
- Install laminate flooring in accordance with the manufacturer's instructions.
- Maintain the required expansion gap around the perimeter of the room.

6. Fit Skirting, Architrave and Scotia

Note: We recommend painting skirting boards, architraves and scotia before installation.

- Cut skirting boards, architraves and scotia to size. It is your choice whether to use butt or mitre joints.
- Fix securely in position using a nail gun and 38mm brad nails provided.
- Ensure joints are tight and all components are level and aligned.

7. Second Fix Electrics

- At this stage you will need a qualified electrician to fit the second fix electrics for your room.

8. Caulk, Fill & Complete Touch-Ups

- Apply decorators' caulk to all skirting, architrave, and internal trim junctions.
- Fill any nail holes, minor gaps, or surface imperfections.
- Sand filled areas where necessary.
- Complete all paint touch-ups to achieve a clean, professional finish.

Once all tasks are finished, clean up and enjoy your new garden room!

Please send us photos of your achievements.



THANK YOU

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