Duraflex
Making The Difference

Dura-Room
Installation Manual

Dura-Room

www.duraflex.co.uk

This installation manual is generic and is not specifically designed around the size and shape of your garden room.
Please read this guide in its entirety before commencing installation

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Part 5: Breather Membrane

Part 6: Frames

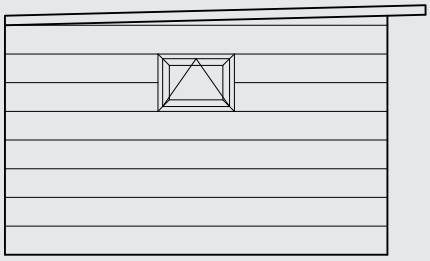
Part 7: External Wall Finish

Part 8: Guttering

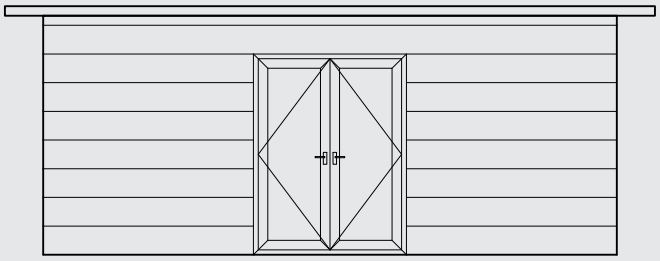
Notes

Dura-Room Styles

Style 1

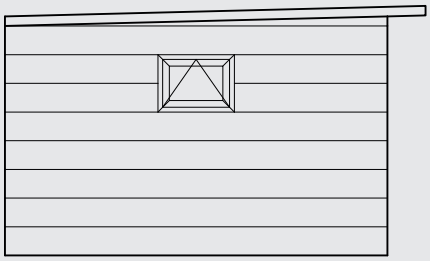


Side Elevation

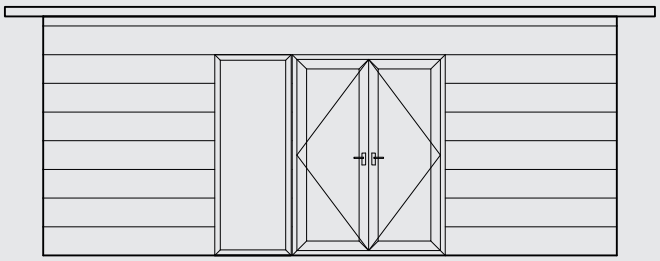


Front Elevation

Style 2

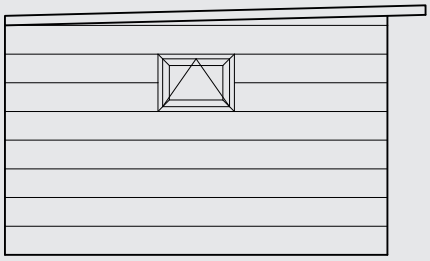


Side Elevation

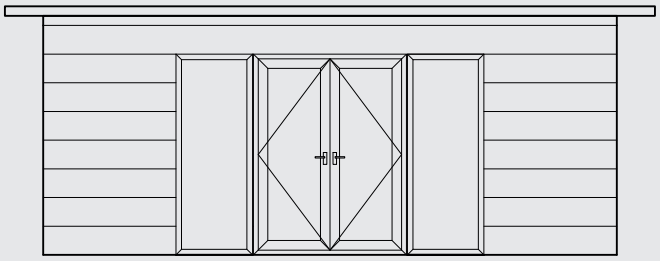


Front Elevation

Style 3



Side Elevation



Front Elevation

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Health and Safety

IMPORTANT

Read ALL the instructions completely BEFORE commencing any work, more than one read may be necessary. Understanding these instructions and familiarity with procedures will make the build process much easier and an enjoyable project to undertake. NOTE: not reading the instructions could lead to problems later on in the build. Be aware of the weather conditions during the building process.

Health, Safety & Environmental Issues

As with any type of construction work, there are inherent dangers when assembling a garden room. The following supplement is designed to supply the installer with general health safety and environmental information that may be required during the assembly. The appendix is a guide to 'best practice' but cannot be considered as comprehensive. You are advised to work safely at all times.

1. General Site Safety

All sites are different and have different hazards. Have a general regard to what can cause harm. The construction site itself should be made a restricted area. Particularly at risk are children and animals. You also need to consider the security issue. Organize your space. Don't open boxes haphazardly and leave components lying around that can get damaged, lost or pose a trip hazard. Be aware of the weather forecast. Wet conditions cause specific hazards. Put controls in place to manage any possible vehicular movement on site. Protect the environment by disposing of your rubbish appropriately.

2. Personal Protective Clothing

The following PPE should be worn throughout the construction - customers responsibility.

- Safety footwear

The following PPE should be worn under certain conditions: (Follow machinery guidelines where applicable)

- Safety glasses when drilling
- Hearing protection when drilling
- Dust mask if dust is likely to be generated
- Gloves as applicable
- Advisable to keep arms and legs covered
- Hard Hat when working at heights or when elements are above shoulder height

3. Tools & Equipment

Check the condition of your tools prior to use, for obvious damage. Get them checked out if in doubt. Arrange for your tools to have a portable appliance test. Any electric hand tools are 110 volts or used in conjunction with a residual circuit breaker. Don't use tools other than for their intended purpose. Follow manufacturer's guidelines as applicable.

4. Formal Procedure for the Use of Knives and Chisels

Ensure when using a knife / chisel you always keep your hands behind the blade. Ensure that you cut away from your body – NEVER towards yourself. Ensure that the position of others is away from the cutting direction.

Keep the tooling in a sharp condition so you don't have to exert excessive force to cut. Always pick up the tool by the handle. Always ensure the tool is stored safely where a sharp edge cannot cause injury. Only use the tooling for its intended purpose where possible.

5. Manual Handling

All modular WALL and ROOF pod sections are a two man lift (min). Lift correctly. STOP & THINK. Plan the lift.

- Where is the load going to be placed?
- Use appropriate handling aids if possible.
- Do you need help with the load?

Remove obstructions such as discarded wrapping materials. For a long lift, such as floor to shoulder, consider resting the load mid-way on a table or bench in order to change grip.

Place Your Feet

Feet apart, giving balanced and stable base for lifting. Leading leg as far forward as is comfortable.

Adopt a Good Posture

Bend the knees so that your hands are almost level with your waist. Don't kneel or over flex the knees. Keep the back straight and lean forward slightly over the load if necessary to get a good grip. Keep the shoulders level and facing in the same direction as the hips.

Get a Firm Grip

Try to keep the arms within the boundary formed by the legs. The optimum position and nature of the grip depends on the circumstances and individual's preference, but it must be secure. A hook grip is less fatiguing than keeping the fingers straight. If it is necessary to vary the grip as the lift proceeds, do this as smoothly as possible.

- **DON'T JERK**
- **MOVE THE FEET**
- **KEEP CLOSE TO THE LOAD**
- **PUT DOWN, THEN ADJUST**

If precise positioning of the load is necessary, put it down first, and then slide it into the desired position.

Team Lifting

It is important that team members are physically evenly matched. One person should take responsibility and coordinate their actions.

Adequate Vision

Clear vision may mean multiple trips with smaller loads, but it is safer.

ENSURE A MINIMUM OF TWO PEOPLE THROUGHOUT INSTALLATION

Components **List**

Fixings

- **5.5mm x 90mm** - pod to base / frame / eaves beam
- **5mm x 40mm** - battens (not supplied)
- **4.0mm x 30mm** - Roof fixing plates / cladding / starter trim
- **5.0mm x 50mm** - Eaves Ties / OSB packers / floor chipboard / roof rafters / OSB fillets
- **5.0mm x 70mm** - Pod to eaves / Pod Screws (roof)
- **5.0mm x 90mm** - Corner post / Eaves beam / wall ties / Wall rafters / front beam

Bolts & Washers

- **75mm Bolts** - roof rafters
- Flat Washers (Use with every bolt)

Fascia Components

- Fascia Board
- Flat Board
- Fascia Corners
- Fascia Pins
- Fascia Joins*

Roof Covering*

(Only applicable for flat roofs)

- Firestone Rubber
- Edge Trims
- Corner Trims
- Drip Edge Trim (2 part)
- Bonding Adhesive

Gutter Components

- Gutter Lengths (4m)
- Down Pipe
- Gutter Bends
- Down Pipe Clips
- Gutter Stop Ends
- 112º Pipe Bends
- Gutter Union
- Down Pipe Shoe

Other Components

- 50mm floor insulation
- Hybrid Insulation (already installed)
- Breather Membrane
- Steel Eaves Tie
- Cladding
- Cladding 2 part corner trims
- Cladding starter trim
- Wall battens (25 x 50mm)

* = If Applicable

Recommended **Tools**

The below tools are only advisable. Additional tools may be needed.

IMPORTANT: It is the installer's responsibility to make sure the correct safety equipment is used during installation of the Dura-Room

(Foundations not supplied)

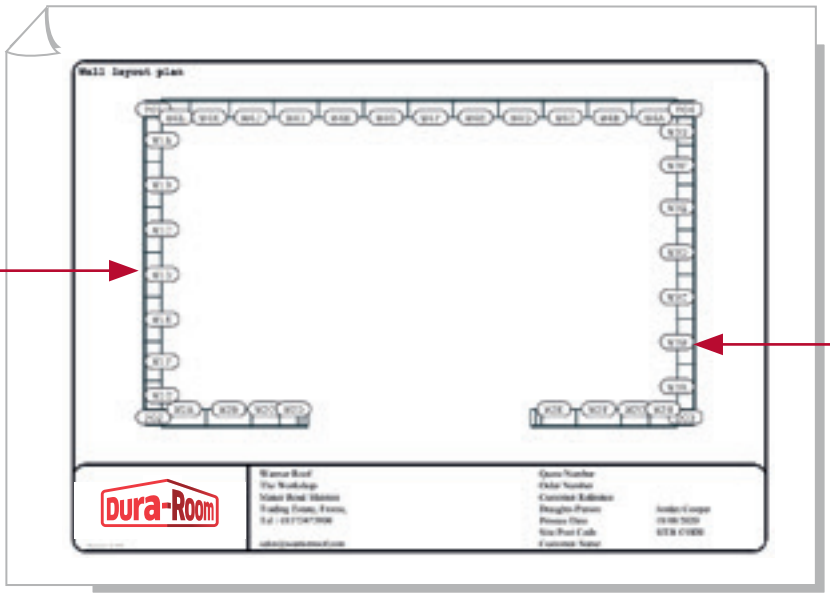
It is the installers responsibility to ensure that adequate support is applied and that ground conditions are suitable.

We strongly recommend applying a damp proof course at ground level to prevent moisture.

Included **Materials**

Plans are sent with delivery. Please note these below plans are not a true representations of your Dura-Room design.

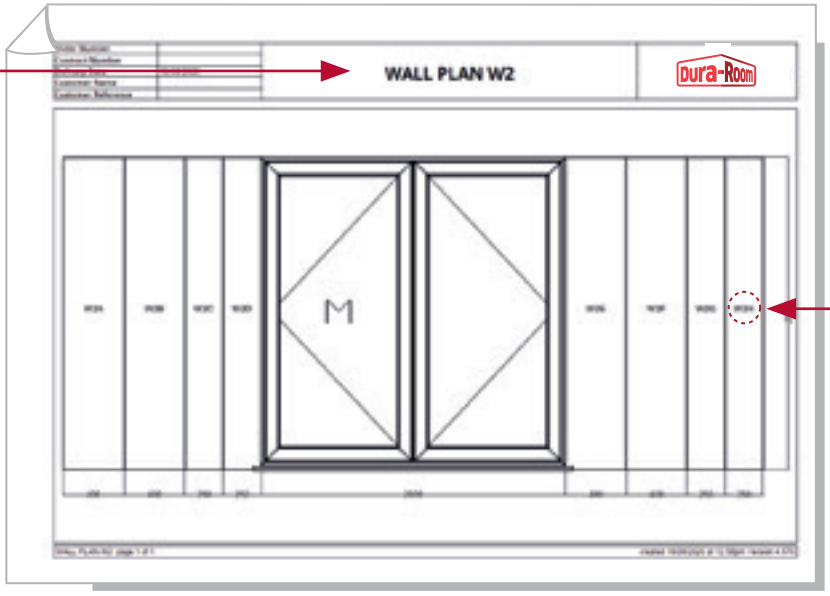
Wall Layout Plan



W1' represents wall 1 / wall 2 etc

Each pod is given a specific letter which corresponds with the 'elevation drawings'

Wall Elevation Plan



'W2' indicates which wall is being referred to

Ensure each pod is in the correct position. Refer to labelling

x1 ELEVATION DRAWING IS CREATED FOR EACH SIDE OF YOUR DURA-ROOM.

Included **Materials**

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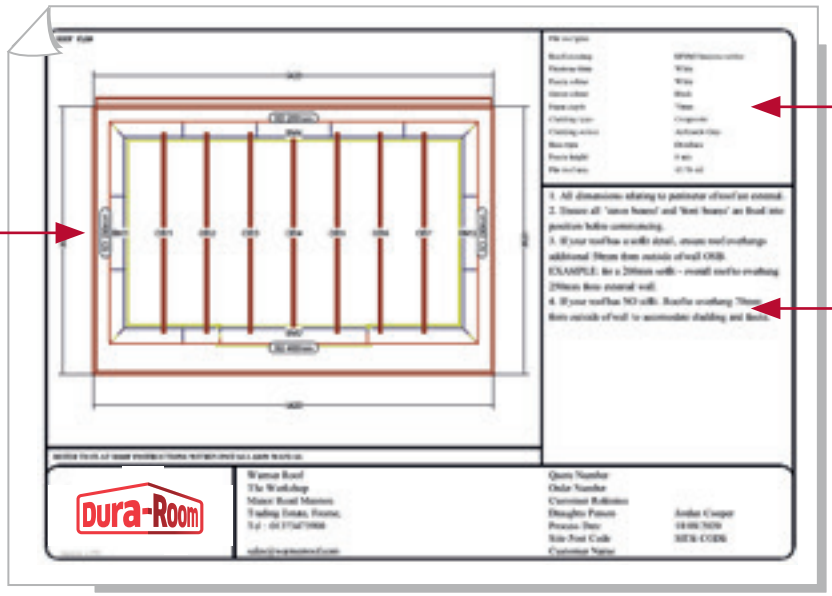
Roof Plan

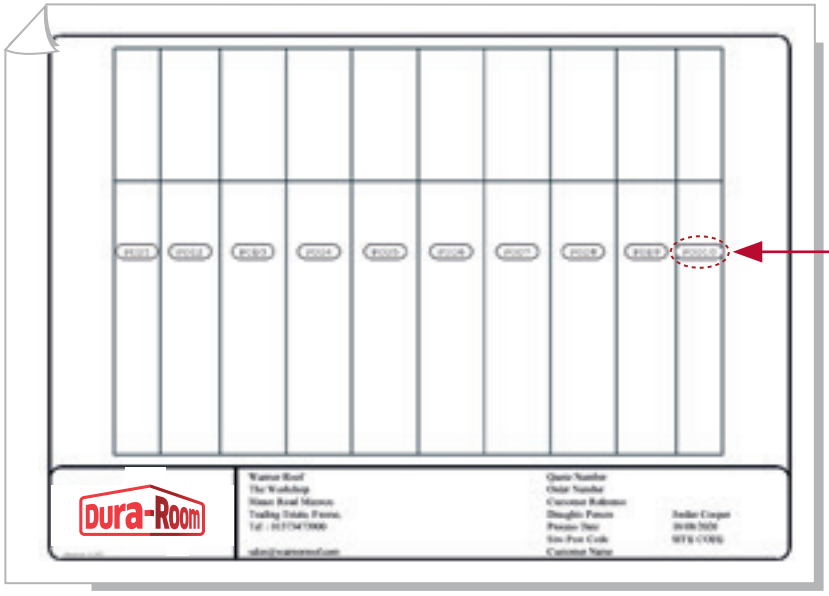


'SD' represents any soffit overhangs

Colour details

Please note guidelines

Roof Pod Layout Plan



Each roof pod is given a specific number to help locate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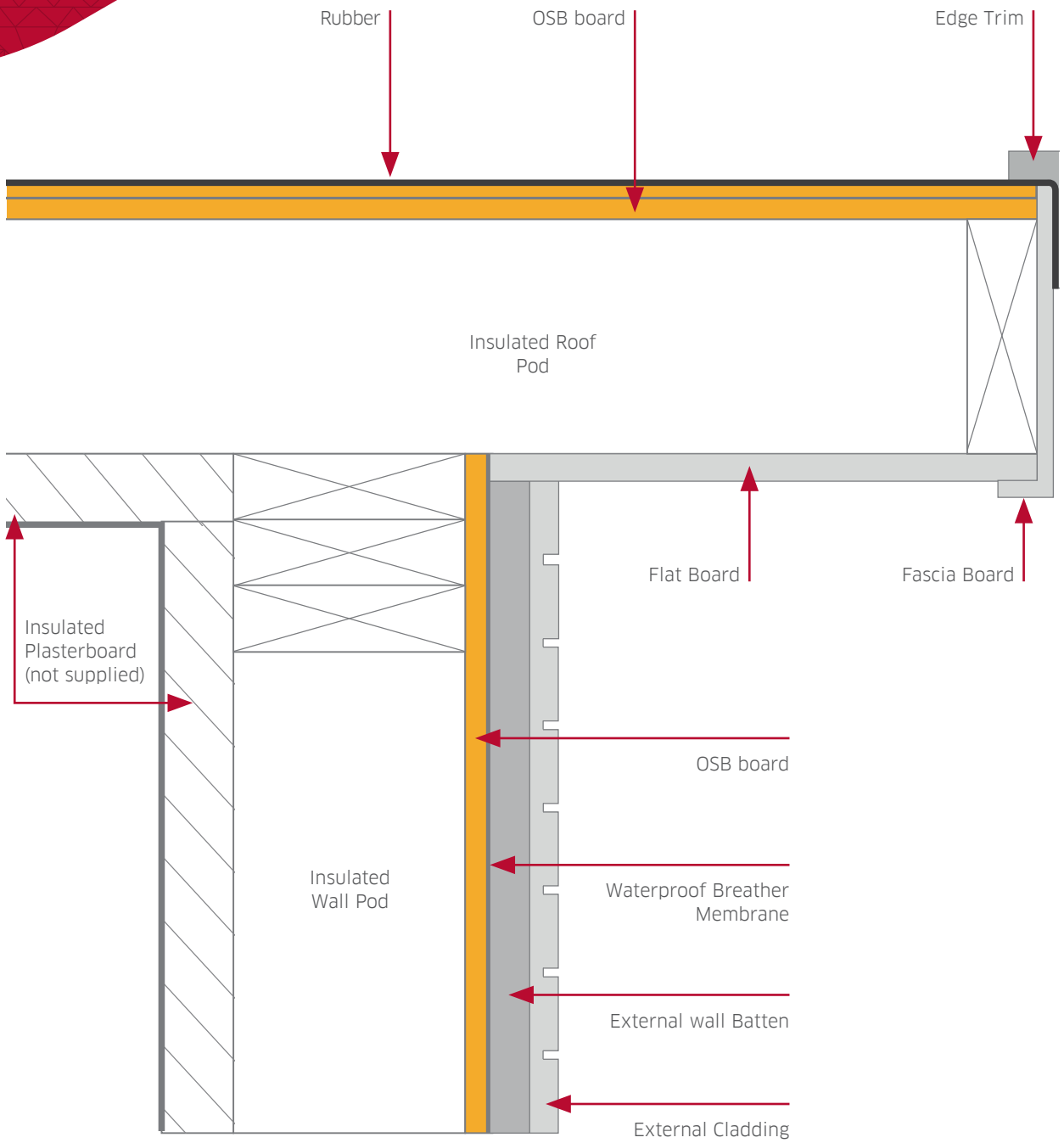
Flat Roof **Make-Up**



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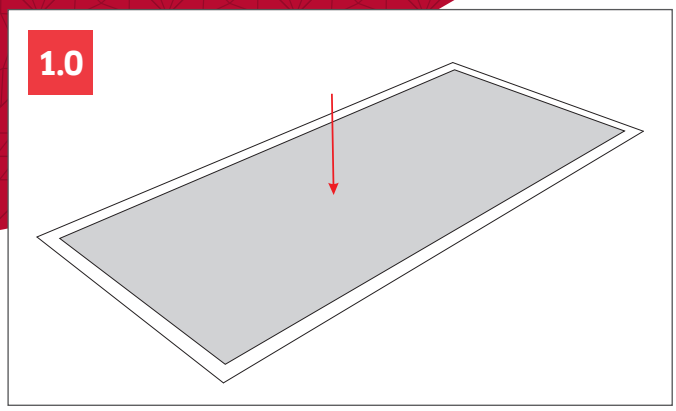
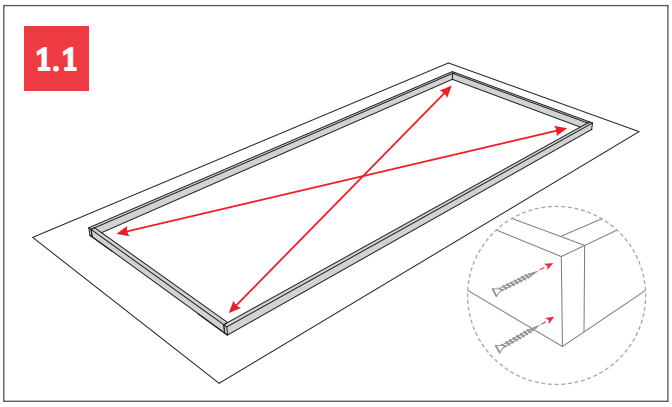
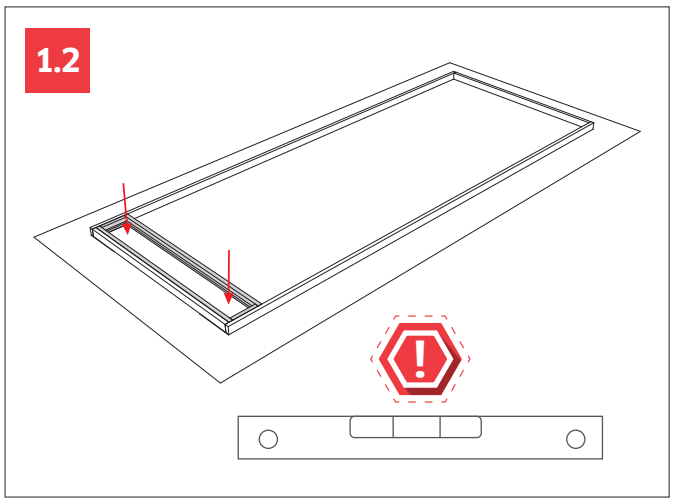
Dura-Room
Wooden Base System

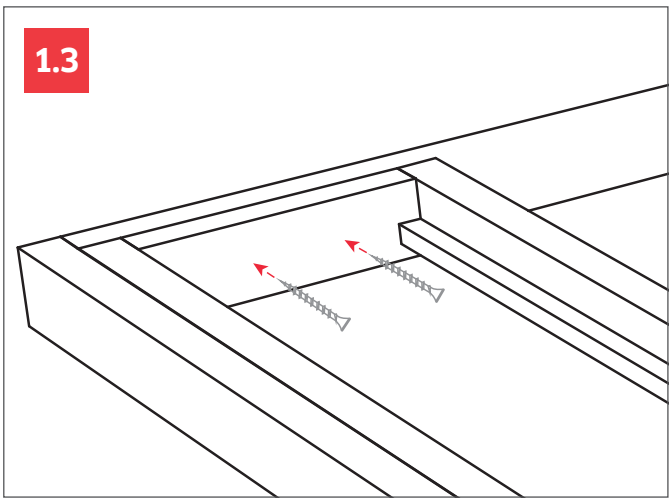
Part 1

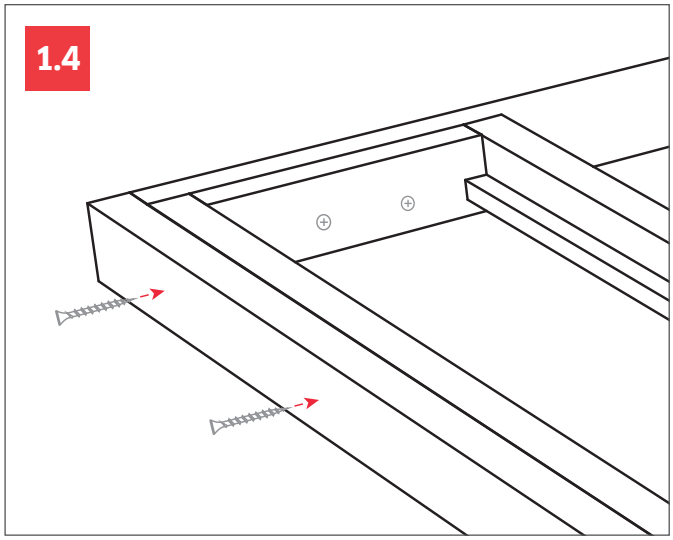
Part 1
Wooden Base System











Instructions

1.0 Lay a polythene membrane (not supplied) over the base.

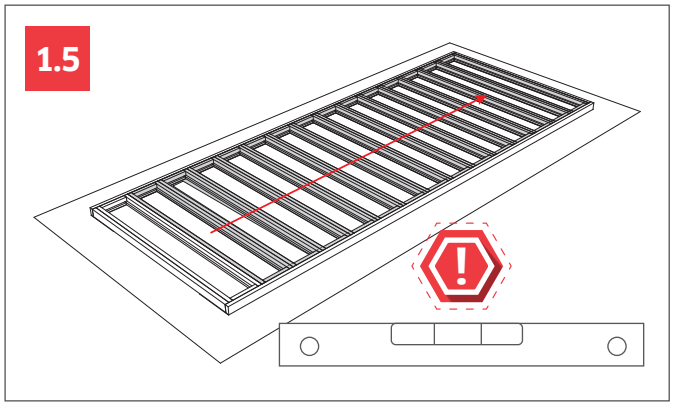
1.1 Lay outer base boarder onto foundations. Check diagonals and ensure border is level. Fix each corner with 5x90mm screws (x2 per corner).

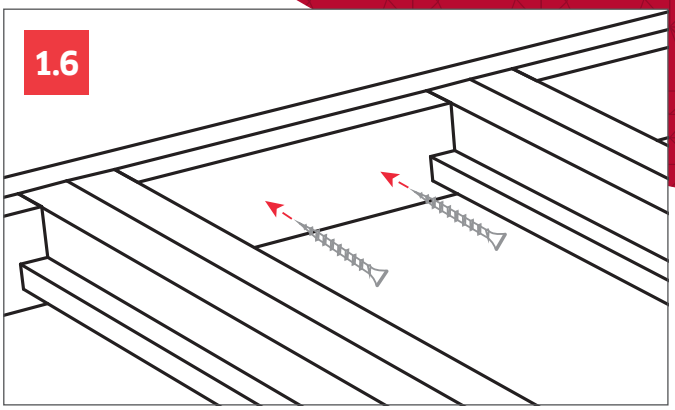
1.2 Lower first base pod and clamp into position (Refer to Base Layout Plan).

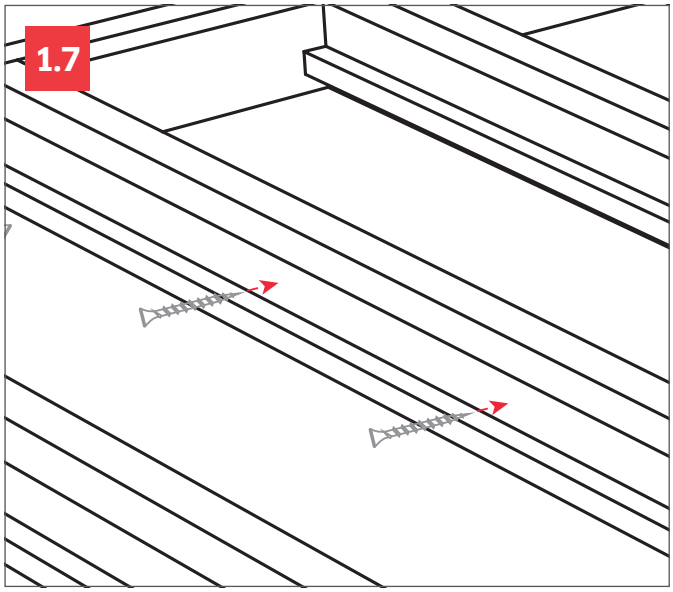
1.3 Fix front and back with 5x90mm screws (Refer to fixing detail).

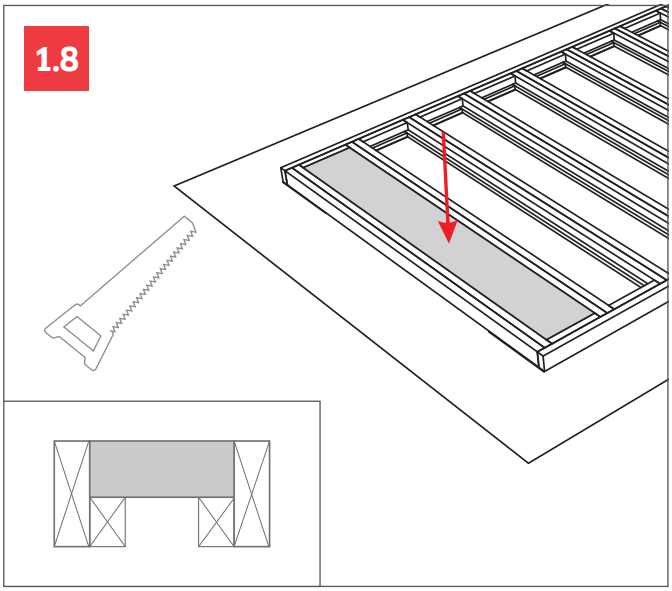
1.4 Fix to side border with 5x90mm screws. Fix from outside (Refer to fixing detail).

Part 1
Wooden Base System









Instructions

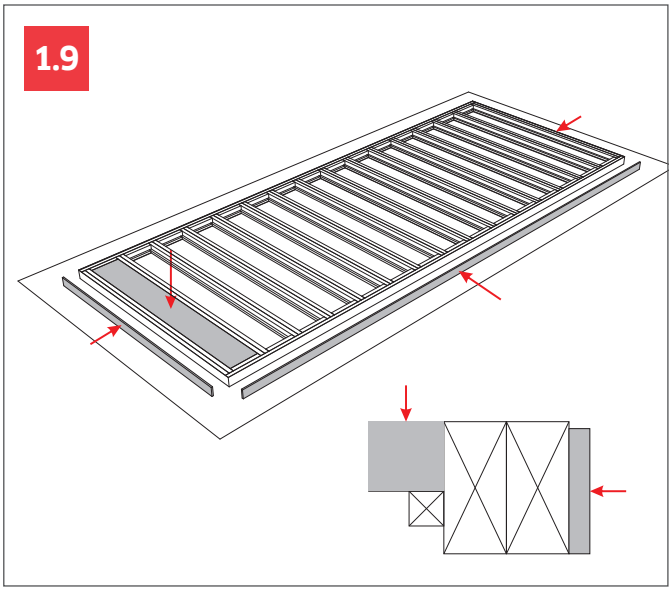
1.5 Add the remaining base pods in the correct sequence and fix into place (Refer to base layout plan).

1.6 Continue fixing each base pod front and back with 5x90mm screws (Refer to fixing detail).

1.7 Fix each joining base pod with 5x90mm screws (Refer to fixing detail). Check the base for size prior to fitting insulation/OSB floor. Ensure the base is level and not sloping towards the front to ensure the correct roof run off.

1.8 Cut 50mm floor insulation to size and slot into place. Ensure insulation is cut tight to opening.

1.9 Fix polythene membrane to all four sides of the base with staples. Fit 95mm trim to front and sides of floor frame using poly top nails.



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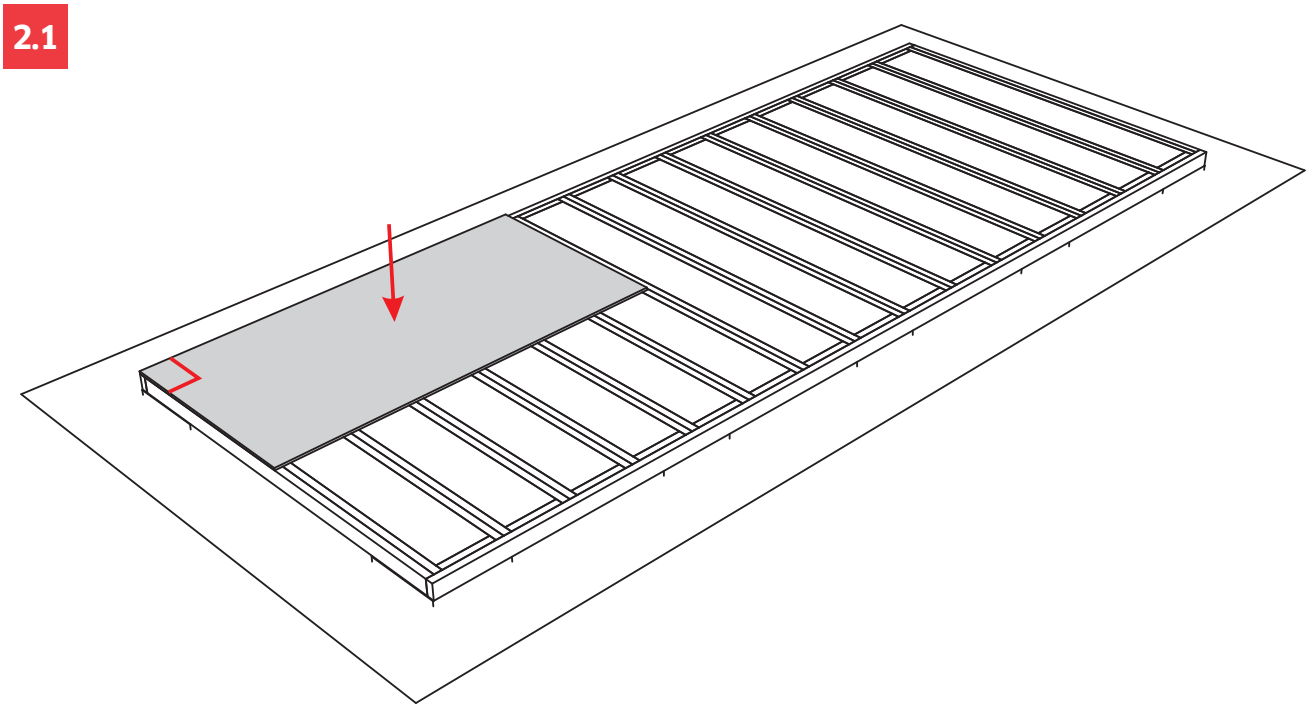
Dura-Room **Flooring**

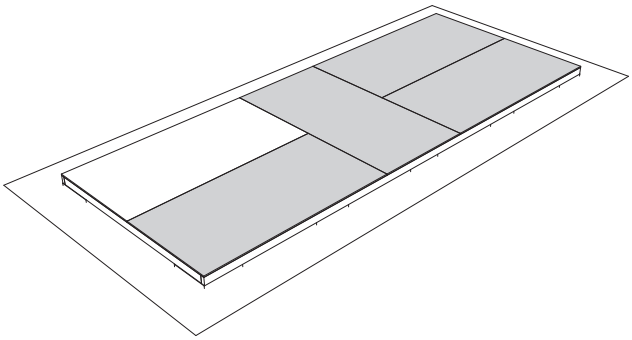
Part 2

Part 2
Flooring

2.1



2.2



Instructions

2.1 Start laying the floor boards from rear left hand side of the garden room. Ensure the boards are laid the correct way up as marked. Use the cut off from last run to start the next. Always trim the boards to ensure the joins fall and are fixed on a joist. It is advisable to glue the joins with waterproof wood glue for extra strength (not supplied). Secure the flooring to joists using the 50mm self drilling screws.

2.2 Double check width projection and diagonals to ensure they are accurate prior to next steps.

YOUR FLOOR IS NOW READY FOR FINISHING WITH YOUR CHOICE OF COVERING. FINAL FLOOR COVERING TO BE LAID ONCE GARDEN ROOM IS COMPLETE.

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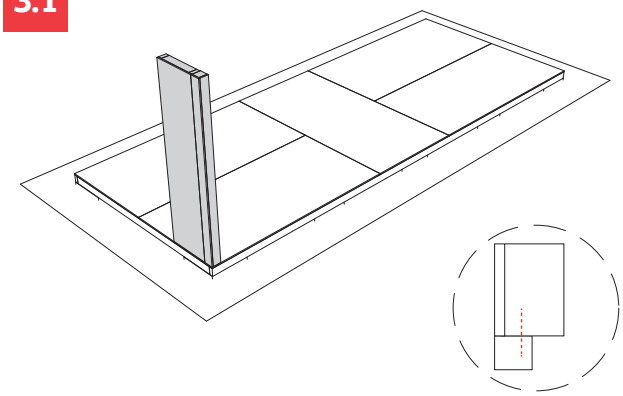
Dura-Room
Wall Structure

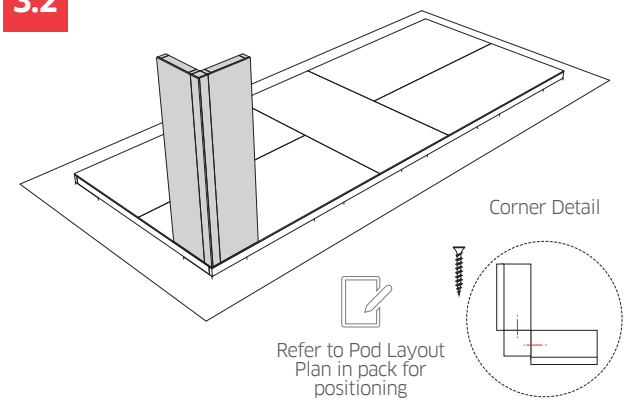
Part 3

Part 2
Wall structure

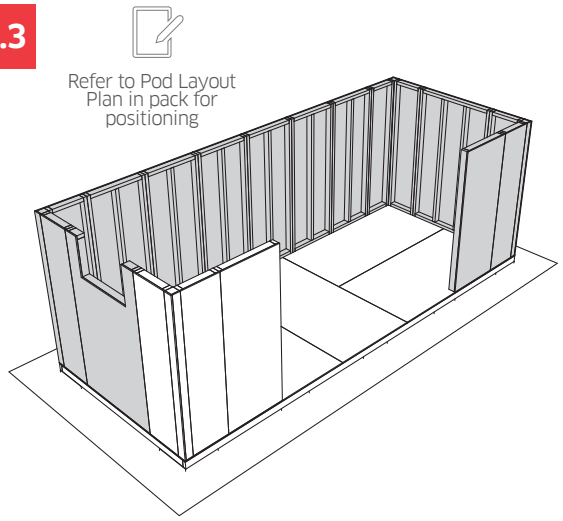
3.1



3.2



3.3



Instructions

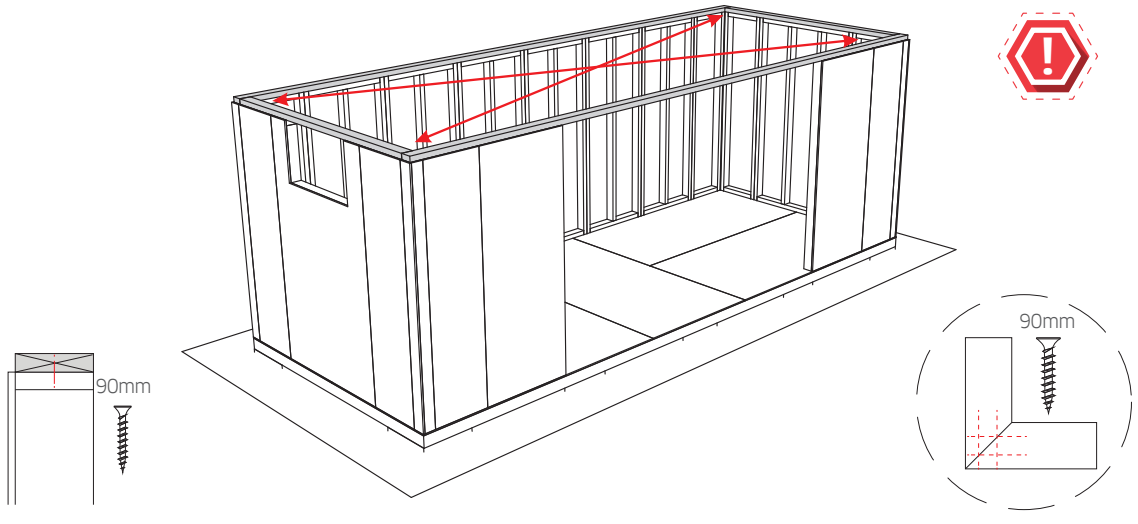
3.1 Ensure outside of OSB is flush with outside of base. Ensure each pod is fixed to base with x2 90mm fixings.

3.2 Create corner section (made up from x2 wall pods AND corner post) Fix corner post to each wall pod with x5 - 90mm fixings each side - Ensure corner post is tight to INSIDE of pods - see corner detail. Ensure OSB on wall pod is flush with outside of base.

3.3 Working around the perimeter Insert wall pods and fix into position. Ensure each wall section is fixed to adjoining pod with x4 90mm fixings. Ensure each pod is fixed to the base with x2 90mm fixings. Ensure wall pods are flush with base and are plumb.

3.4 Lower wall tie(s) into position. Cross fix each corner using x2 90mm fixings. Ensure beam is flush to INSIDE edge off wall pod. Fix through top of wall pod with 90mm fixings. IMPORTANT: Ensure wall tie(s) and corner sections are square.

3.4



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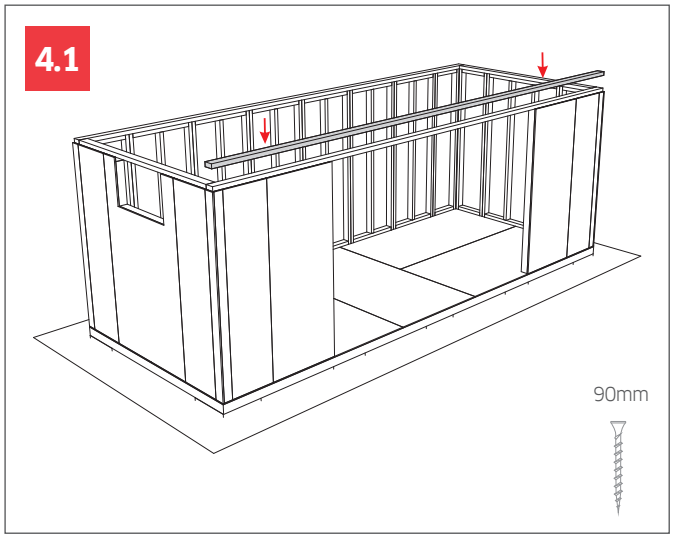
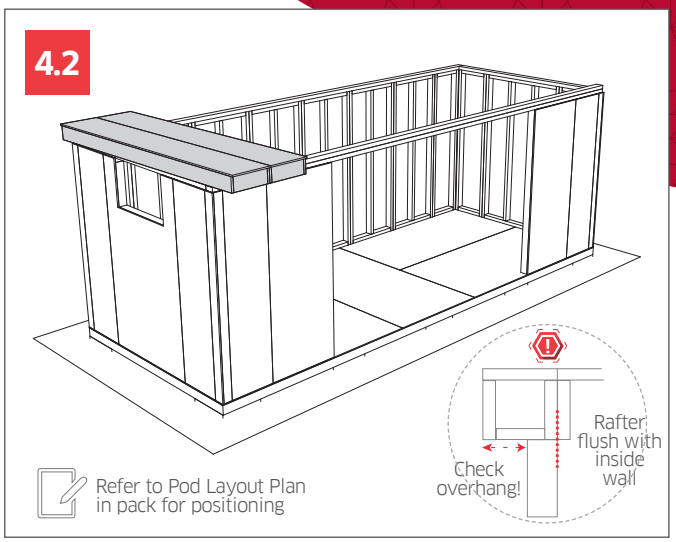
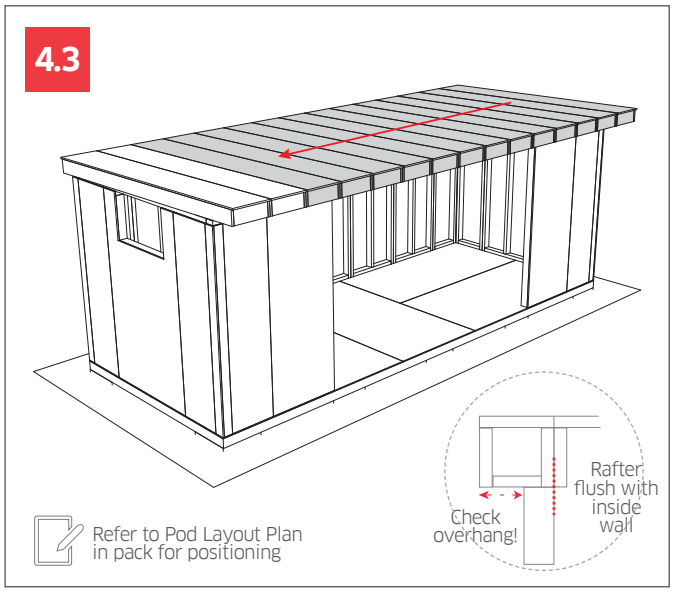
Dura-Room
Flat Roof

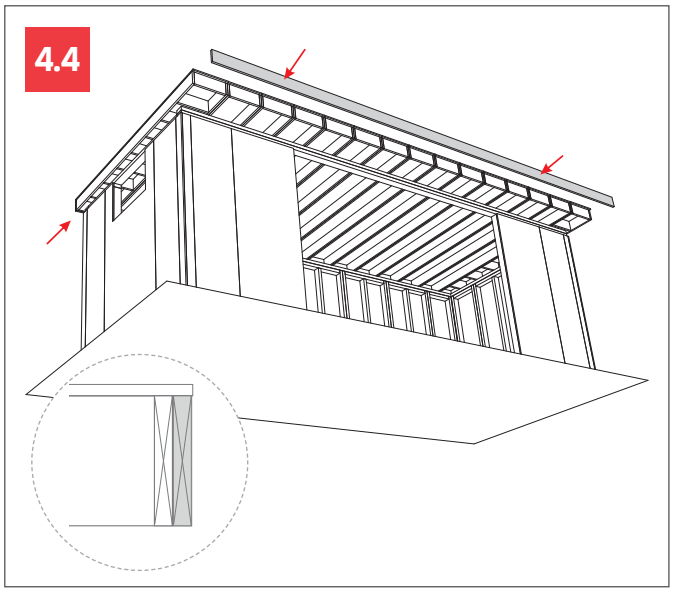
Part 4

Part 4
Flat Roof









Instructions

4.1 Lower front beam into position and fix into place with 90mm screws - 400mm spacings. Ensure beam is fixed to FRONT of roof as this will determine direction of water fall.

4.2 Lift first two roof pods onto walls. Fix adjoining rafters together with 50mm screws. Move pods into correct position ensuring soffit overhang is correct (refer to overhang size given on roof plan drawing). As per drawing- centre of the rafter to be flush with the inside wall.

NOTE: If the roof drawing states zero, use 70mm overhang – if it states greater than zero please add 50mm (ie. 400mm overhang = 450mm). This is to account for batten and cladding.

4.3 Lift remaining roof pods into position (follow roof plan in pack). Continue to check overhang is correct and fix adjoining roof rafters with 50mm screws. Work your way in from outside edge to ensure overhang is applied equally.

4.4 Fix 45mm beam to front and rear of roof with 90mm screws. Ensure beam is fixed with any bow to the top.

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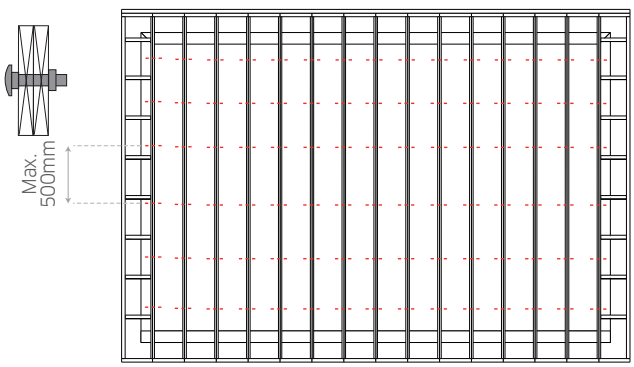
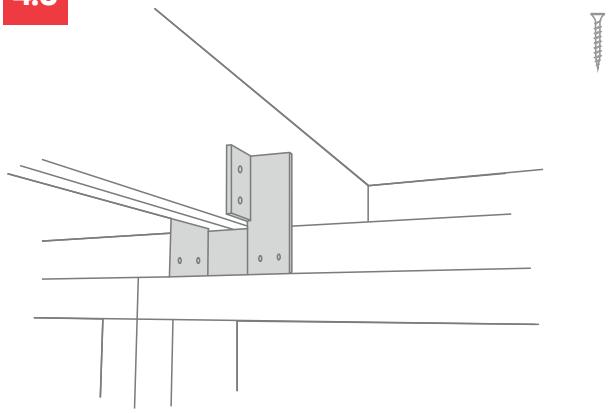
Part 4
Flat Roof

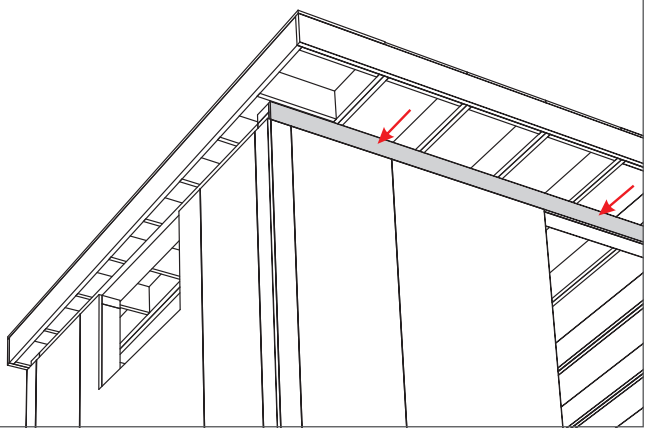
4.5



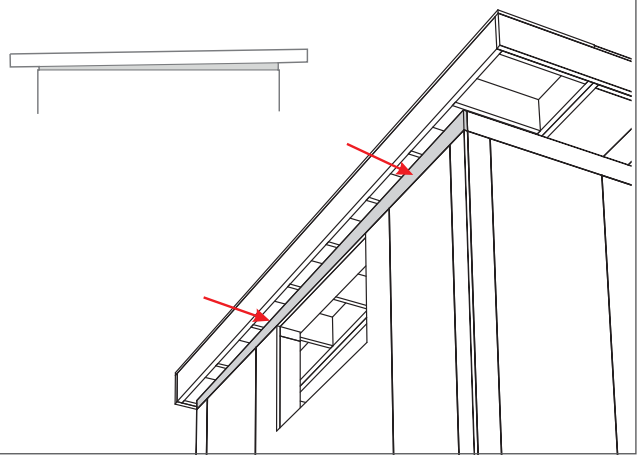
4.6



4.7



4.8



Instructions

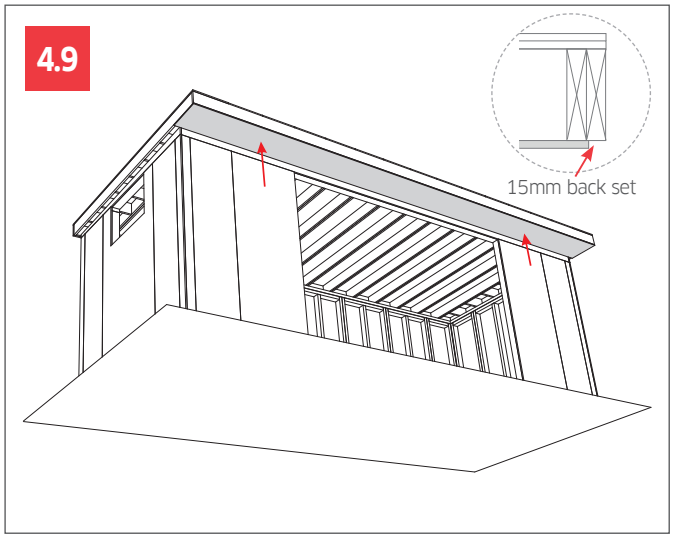
4.5 Typical rafter connection: 22mm + 22mm rafters = 75mm Bolts. Pre drill with 10mm drill bit and insert bolts. Ensure first and last bolt is no more than 150mm away from inside of wall section. Ensure centre spacings are no more than 500mm.

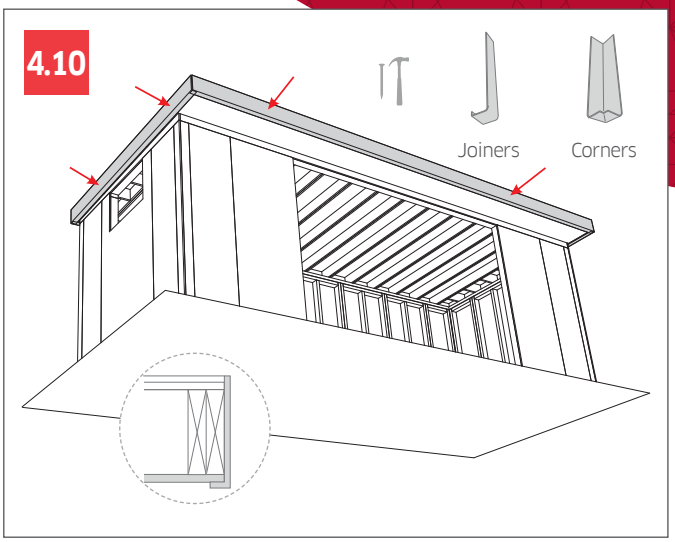
4.6 Locate fixing plate to inside of TOP wall tie and slot in-between roof rafters. Fix into place using 4 x 30mm screws in the pre drilled holes. Repeat this procedure to front AND back of roof. Ensuring correct overhang is maintained.

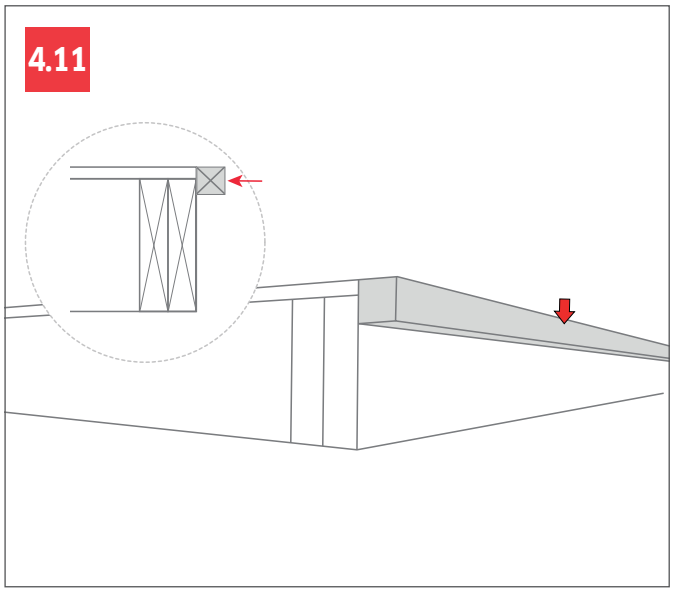
4.7 Fix OSB packers to front and back face with 5 x 50mm screws. Ensure OSB packer sits on top of wall OSB and sits flush to outside edge of walls.

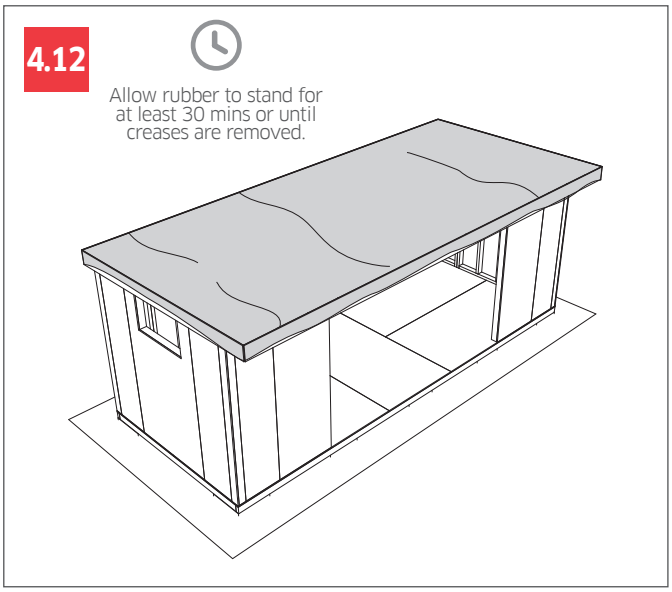
4.8 Fix side fillets into place with 5 x 50mm screws. Ensure fillet piece sits on top of wall OSB and sits flush to underside of roof noggins.

Part 4
Flat Roof









Instructions

4.9 Cut flat board to size and fix to underside of soffit with the pins. Ensure the pins are fixed to rafter beams (on front and back). Set fascia 15mm back from front face of the building.

4.10 Fix fascia board to all four sides of roof overhang with the pins. Ensure fascia lips underneath soffit board and runs flush to top of roof OSB(do not fit corners until after rubber roof installation).

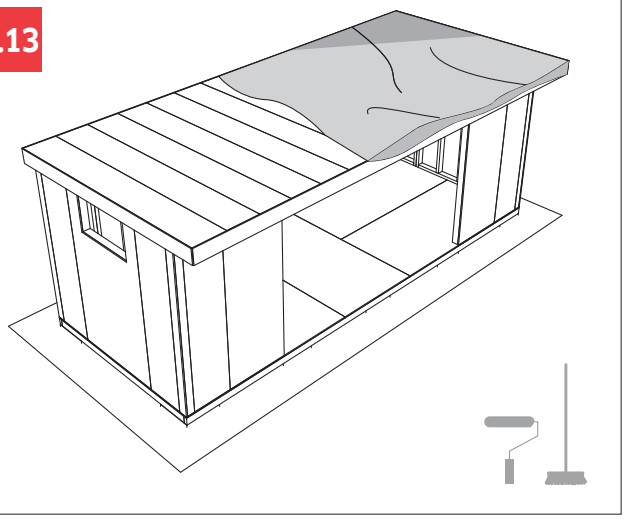
4.11 Fix drip batten to the rear of the roof. Ensure batten is flush with top of OSB.

4.12 Lay rubber onto roof and allow to settle for a minimum of 30 minutes. This will help remove some of the creases prior to gluing. Ensure overhang is even around perimeter of roof.

Dura-Room

Part 4
Flat Roof

4.13



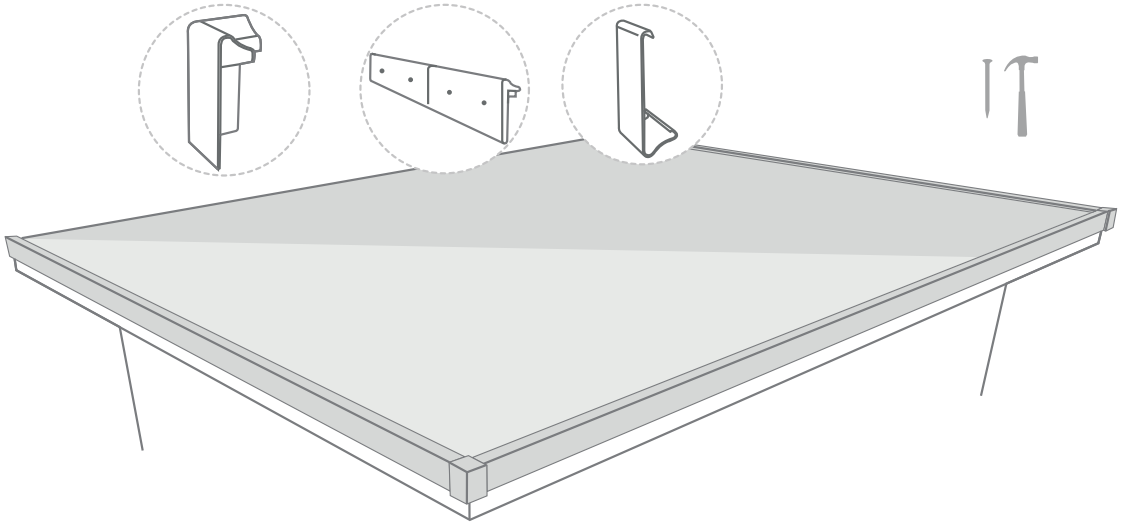
Instructions

4.13 Fold rubber back half way. Folding in roughly 500mm folds can make this easier. Sweep area ensuring surface is totally clean. Apply even layer of water based adhesive to roof AND rubber. Fold over and sweep with a soft brush to remove any air bubbles. Repeat the process on opposite side.

Refer to the Firestone website for installation video.
https://www.rubba-seal.co.uk/installation-guides

4.14 Fix edge trims and corner trims into place with the pins provided. Pull rubber tight around edge before fixing trims into place.

4.14



CHECK WEATHER CONDITIONS - IF YOU DO NOT HAVE TIME TO LAY THE RUBBER, SIMPLY PLACE RUBBER OVER ROOF STRUCTURE, HELD INTO POSITION WITH WEIGHTS.

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Making The Difference

Dura-Room

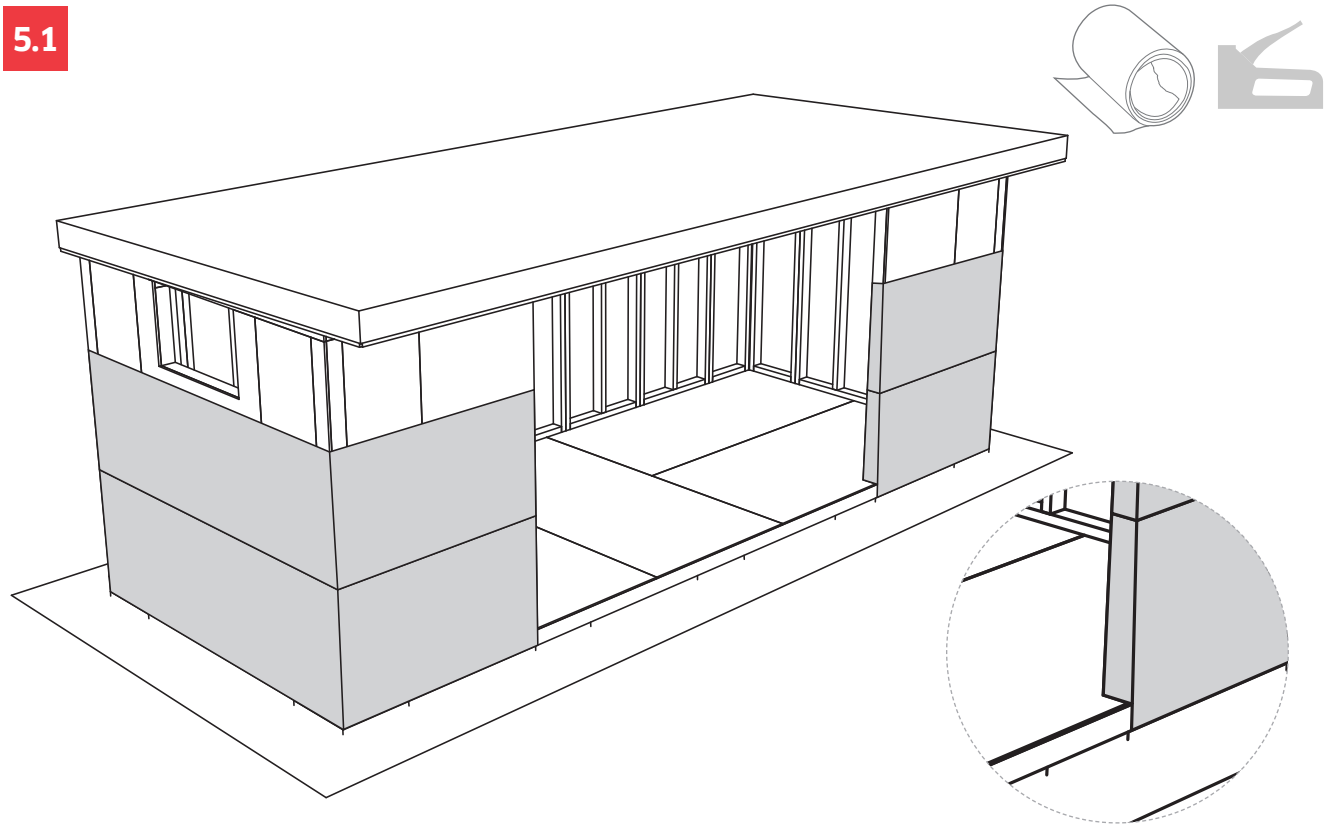
Dura-Room
Breather Membrane

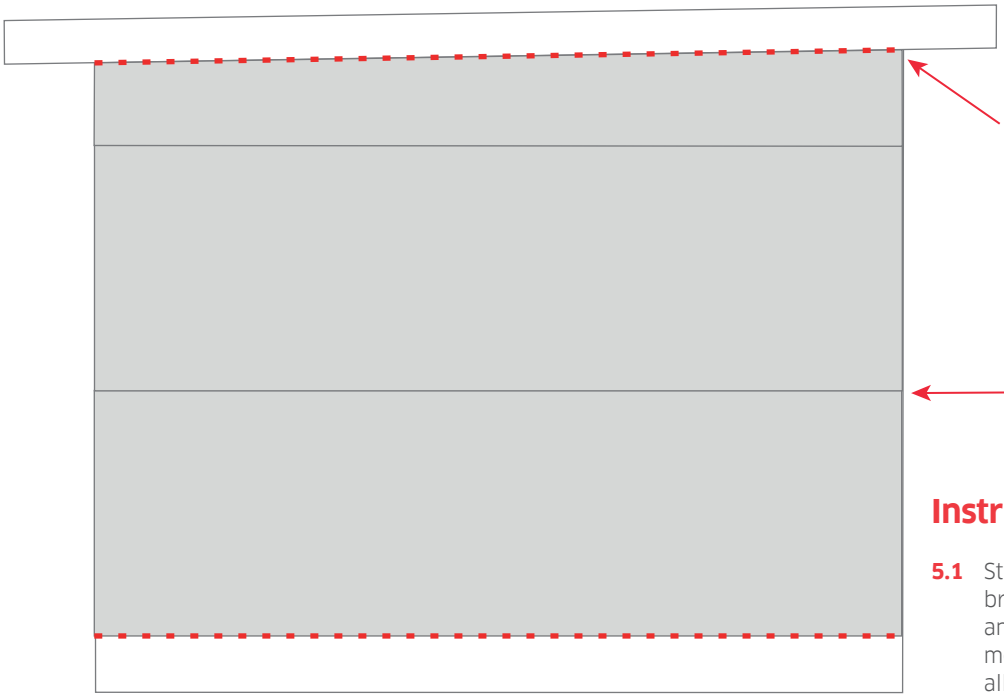
Part 5

Part 5

Breather Membrane

5.1





Instructions

5.1 Starting from the bottom, Run breather membrane horizontal and staple into place. Ensure membrane is wrapped around all wall return openings. Overlap each section of membrane a minimum of 150mm.

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Making The Difference

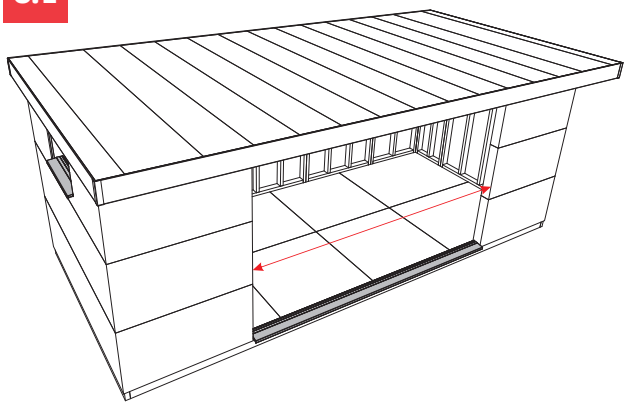
Dura-Room

Dura-Room
Frames

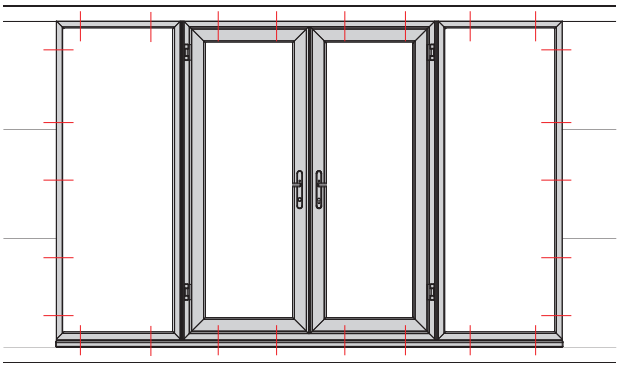
Part 6

Part 6
Frames

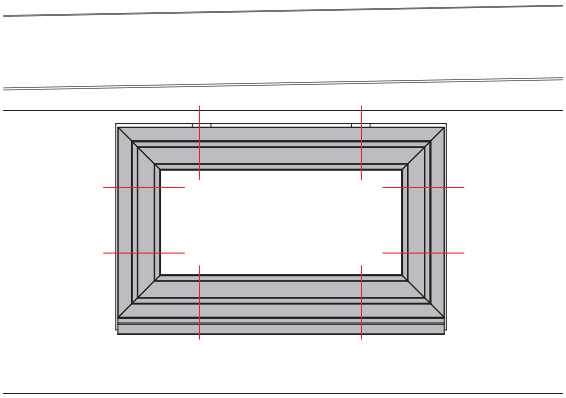
6.1



6.2



6.3



Instructions

6.1 Measure the door / window aperture width and cut the sill to suite. The sill should be 10mm shorter than the aperture to allow space for fitting.

6.2 Fix door and window frames to the sidewalls fixing 150mm from external corners and at centres not more than 400mm apart. Set frame inline with outside face of OSB and mastic seal the gaps after fixing.

6.3 Fix window frames to the sidewalls fixing 150mm from external corners and at centres not more than 400mm apart.

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Making The Difference

Dura-Room

Dura-Room
External Wall Finish

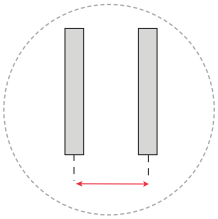
Part 7

Before commencing installation of your external cladding, please create a systematic plan to determine where the cladding should be positioned and if off cuts need to be used.

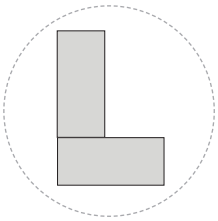
Please note joins may be required. It is the installers responsibility to ensure the cladding is installed efficiently. If the appropriate planning is not carried out resulting in shortages then any additional cladding lengths will be chargeable.

Part 7
External Wall Finish

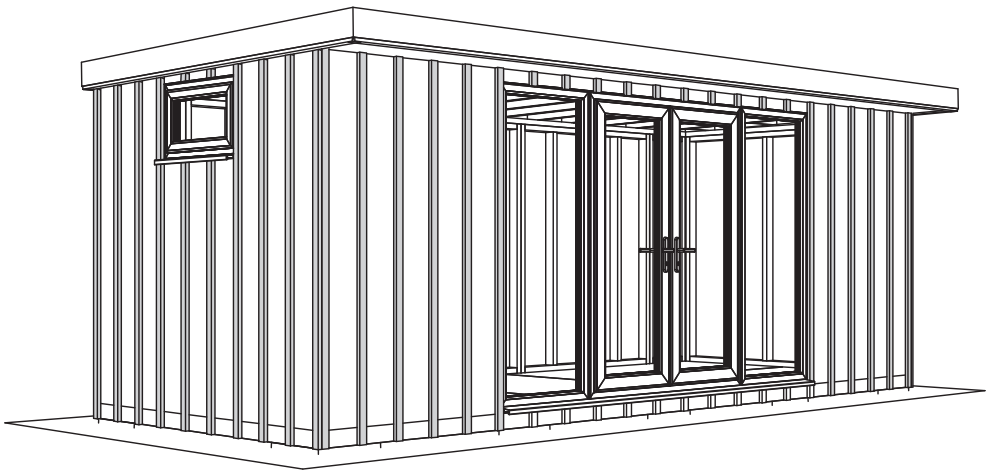
7.1



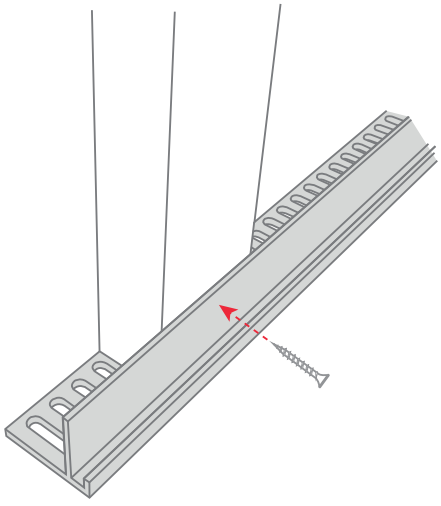
400mm
centre spacings



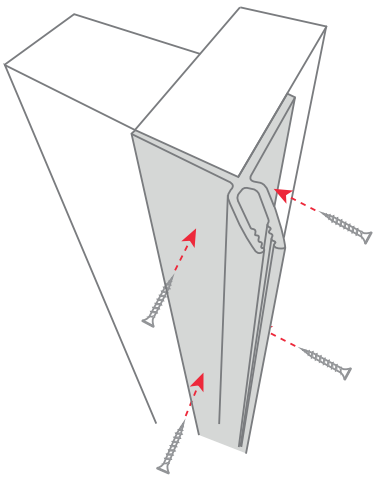
Overlap at corners



7.2



7.3



Instructions

7.1 Cut cladding battens (25 x 50mm) to size and fix vertical to external wall using 5 x 40 screws. Fix at centre spacings ensuring battens run to underside of the roof soffit and finish flush with top of floor OSB.

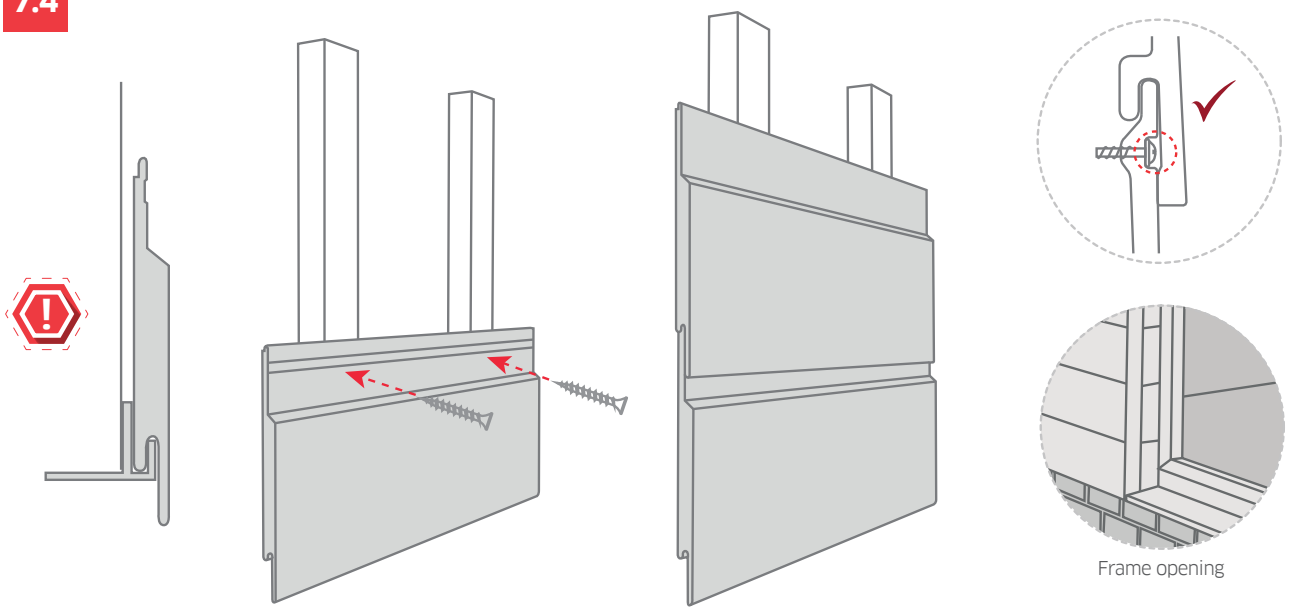
7.2 Fix starter trim around bottom edge of walls. Fix to front using 5 x 30 screws.

7.3 Fix (part 1) of the 2 part corner trim to all corners, including next to frame openings. Fix into place with 4 x 30 screws.

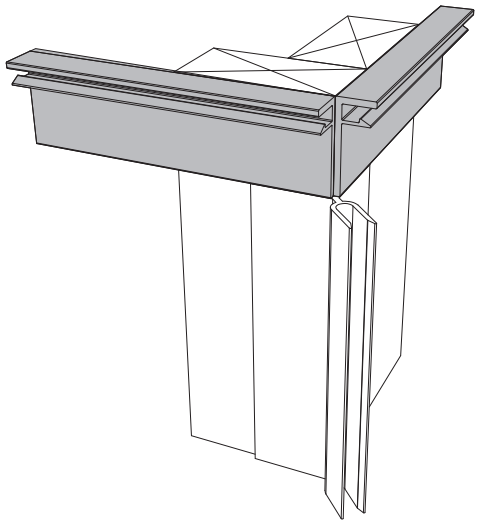
NOTE - For additional support visit
www.durasid.com/en/Installation

Part 7
External Wall Finish

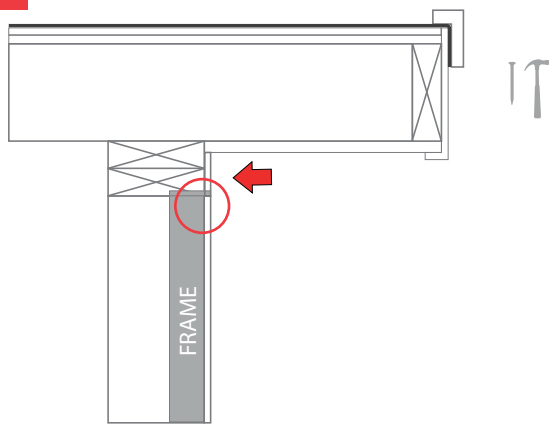
7.4



7.5



7.6



Instructions

7.4 Starting from the bottom, slot the first row of cladding into the vented started trim. Allow expansion gaps at all edges and junctions. Fix through into the battens with 4 x 30mm screws. DO NOT use excessive force or drive the screw through the surface of the cladding. For frame openings, cut cladding to size and butt up against frame.

7.5 Before fitting the top level of cladding fix (part 1) of the 2 part edge trim butting up against the soffits using 5mm x 30mm screws.

7.6 Cut 90mm trim down to size and fix to wall ties(s) directly above all frames. Use fascia pins provided.

NOTE - For additional support visit www.durasid.com/en/Installation

Dura-Room

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Making The Difference

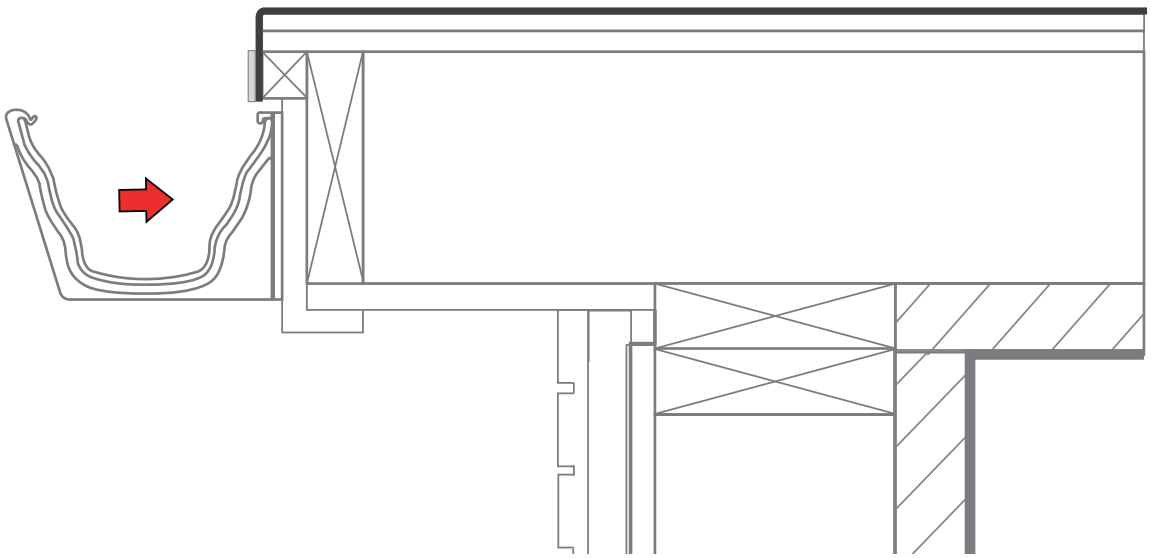
Dura-Room **Guttering**

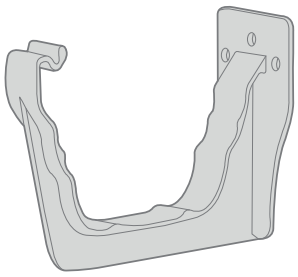
Part 8

Part 8
Guttering

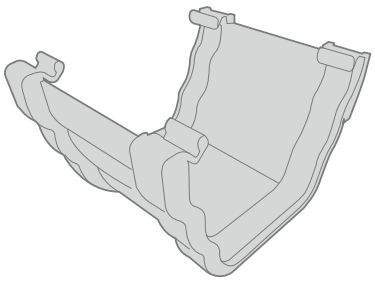
8.1

Flat Roof

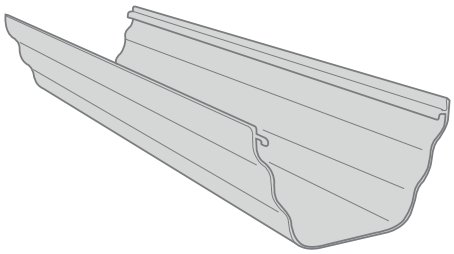




Gutter Brackets
500mm spacing



Gutter Union
(used for joining
gutter lengths)



Gutter length
4000mm

Instructions

8.1 Secure gutter brackets onto fascia (approx 700mm spacings). Attach unions to join gutter when needed. Gutter to run along back face of roof only. Allowing for a 1:350 fall.

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Notes

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Notes

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For further information please contact:

T: 01684 852700
E: info@duraflex.co.uk
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