



# Beautiful, Energy Efficient Garden Rooms

Specification Guide | Version 3.0 | July 2022

**Garden**rooms  
By Ultraframe



**Introducing**

# The Studio and The Pavilion

Easy to build in just one day, Ultraframe Garden Rooms are designed with familiar components that exceed Building Regulations for thermal performance with U-Values as low as 0.15. Unlike cedar clad garden rooms, Ultraframe Garden Rooms won't fade over time, thanks to their unique premium contemporary grey finish.



Dimensions: The Studio 3 Walls 4200mm x 3600mm



Dimensions: The Pavilion Right Hand Corner 4800mm x 2400mm

**Easy and fast to build**

Garden Rooms from Ultraframe are built with familiar Ultraframe components and accompanied with a high quality installation guide to ensure your installation runs smoothly. We suggest using a pre-finished internal board on the interior to save you time on plastering. The wall panels are rapid to install thanks to the patented clip-fit mechanism.

**High thermal performance**

The components for an Ultraframe Garden Room are Building Regulation compliant for use in a home extension. In contrast, standard Garden Rooms are not required to reach this high level and will be more expensive to heat - they might even struggle to achieve a comfortable temperature in the colder months.

**Available with or without fixed rooflights**

Most Garden Rooms treat fixed rooflight integration as an 'extra' which adds cost to the build. Whether you design your Garden Room with fixed rooflights or unglazed the price is the same. You'll only pay extra for the glass. Plus the shaped glazing in the roof adds a unique design element to The Pavilion.

**Short lead times**

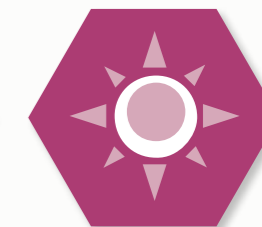
Ultraframe Garden Rooms are precision engineered off site in a high capacity factory. This means your garden room can be delivered within 10 days of your order.

**Longer life span**

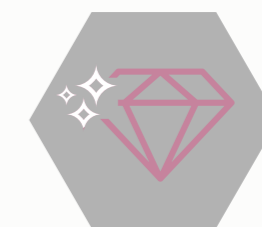
Made from conservatory and home extension quality products, Garden Rooms from Ultraframe stand the test of time. All components are guaranteed for 10 years by Ultraframe. Our Gardens Rooms are intended for use with grey claddings, whether you choose cement boards (e.g. Marley Cedar) or uPVC claddings, they are low maintenance and won't fade quickly like alternative timber claddings.



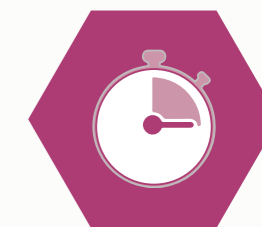
**CUSTOMISE**  
Unbeatable range of design options



**BRIGHT**  
Cost effective, integrated rooflights



**DURABLE**  
Building Regulation approved parts with a 30+ year life span



**FAST**  
Available on a 10-day lead time, watertight in less than a day



**ENERGY EFFICIENT**  
Twice the thermal performance of other premium garden rooms

	Home Extension Building Regulation Requirement	Ultraframe Garden Room Performance	Competitor SIP Panel Garden Room Performance
Roof	0.15	0.15	*0.31
Walls	0.18	0.17	*0.35

\*U-Value measures the amount of heat able to escape. The lower the u-Value the more thermally efficient the room will be.

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## Provided by Ultraframe



Roof



Columns



Wall panels

Breathable membrane, plus vertical battens for easy cladding fixing



Fascia



Bi-fold Support Beam and Structural Goalposts  
Structural Support for large doors



Glass

Conservaglass Standard Blue.  
(Can be supplied unglazed)

## Not Provided By Ultraframe

- Plasterboard
- Doors
- Base
- Cills
- Claddings
- Windows
- Electrics

## Planning Permission

Planning permission is not required providing that:

- If the edge is within 2m of a boundary the height does not exceed 2500mm
- The Garden Room is smaller than 25m<sup>2</sup>
- Once completed at least half the garden remains free from building structures including sheds
- On duo pitch roofs (The Pavilions) if the edge is more than 2m away from the boundary the eaves height is less than 2500mm and the entire height is less than 4000mm
- On single pitch roofs (The Studios) if the edge is more than 2m away from the boundary the entire height is less than 3000mm
- The Garden Room is stand alone (does not use an outbuilding for a host wall)

Additional rules apply for listed buildings, areas of outstanding natural beauty, conservation areas, world heritage sites, national parks and designated land. The studio has a height of 2500mm and does not need planning permission. All other designs will need planning permission if close to a boundary. All set sizes on Ultraframe Garden Rooms are under 25m<sup>2</sup> to comply with planning legislation.

For more information visit [www.planningportal.gov.uk](http://www.planningportal.gov.uk)



The Studio



The Tall Studio



The Pavilion



The Premium Pavilion

Garden Room Design	Planning Permission Required (Within 2m of the boundary)	Planning Permission Required (Beyond 2m of the boundary)
The Studio	No	No
The Tall Studio	Yes	No
The Pavilion	Yes	No
The Premium Pavilion	Yes	No

Providing all other planning criteria met / considered



# The Studio

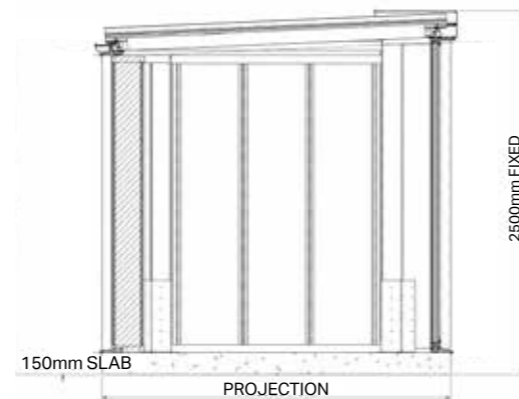
Perfect for when the Garden Room may be located close to a boundary, The Studio is contemporary and compact. Our lowest cost option, The Studio's simple reverse lean-to design maximises the 2500mm height at the front and does not need planning permission.

## Key Features

- Reverse lean-to roof (2.5° pitch) with 2 optional fixed rooflights.
- 2500mm maximum height (no planning permission required)
- 2 tier flat fascia – anthracite grey
- 4 corner columns clad in anthracite grey aluminium

## Sizes

- Projection: 2400mm or 3600mm
- Width: 3600mm, 4200mm, 4800mm or 6000mm



Solid roof with no fixed rooflights



2 rectangular fixed rooflights  
Supplied glazed or unglazed

**Design Options:** There are 3 different design options on The Studio



**Right hand corner**  
2 walls, full height glazing on left hand side, doors and windows to front



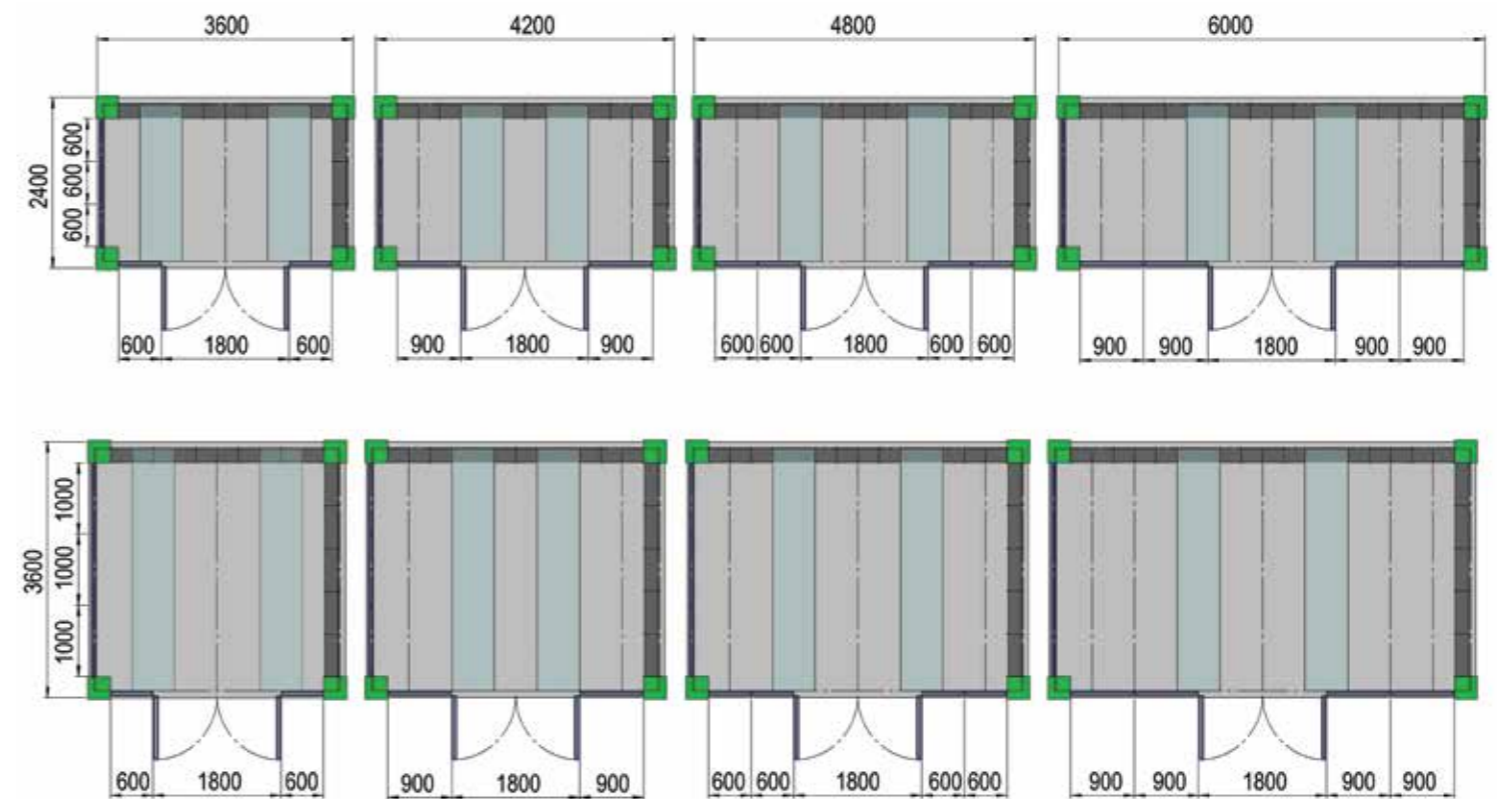
**Left hand corner**  
2 walls, full height glazing on right hand side, doors and windows to front



**3 full walls**  
Windows and doors to the front

## Layouts

The right hand corner suggested layouts below are shown here with fixed rooflights. Please note the rooflight positions are fixed.



## Key:

- Wall panels
- Fixed rooflights
- Insulated corner columns
- Glazed walls
- Insulated roof panels



# The Tall Studio

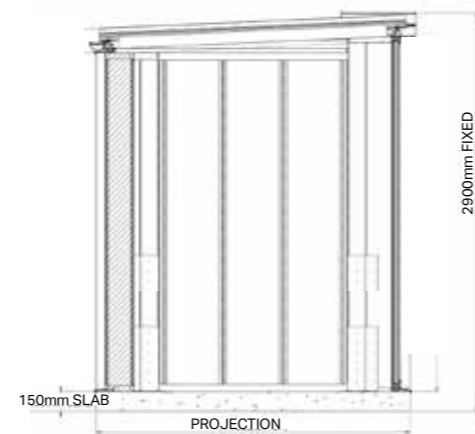
The Tall Studio is contemporary and compact, but has extra room height if needed for added versatility, for example in a home gym. The Tall Studio's simple reverse lean-to design maxes out at 2900mm at the front.

## Key Features

- Reverse lean-to roof (2.5° pitch) with 2 optional fixed rooflights
- 2900mm maximum height
- 2 tier flat fascia – anthracite grey
- 4 corner columns clad in anthracite grey aluminium

## Sizes

- Projection: 2400mm or 3600mm
- Width: 3600mm, 4200mm, 4800mm or 6000mm



Solid roof with no fixed rooflights



2 rectangular fixed rooflights  
Supplied glazed or unglazed

**Design options:** There are 3 different design options on The Tall Studio



**Right hand corner**  
2 walls, full height glazing on left hand side, doors and windows to front



**Left hand corner**  
2 walls, full height glazing on right hand side, doors and windows to front

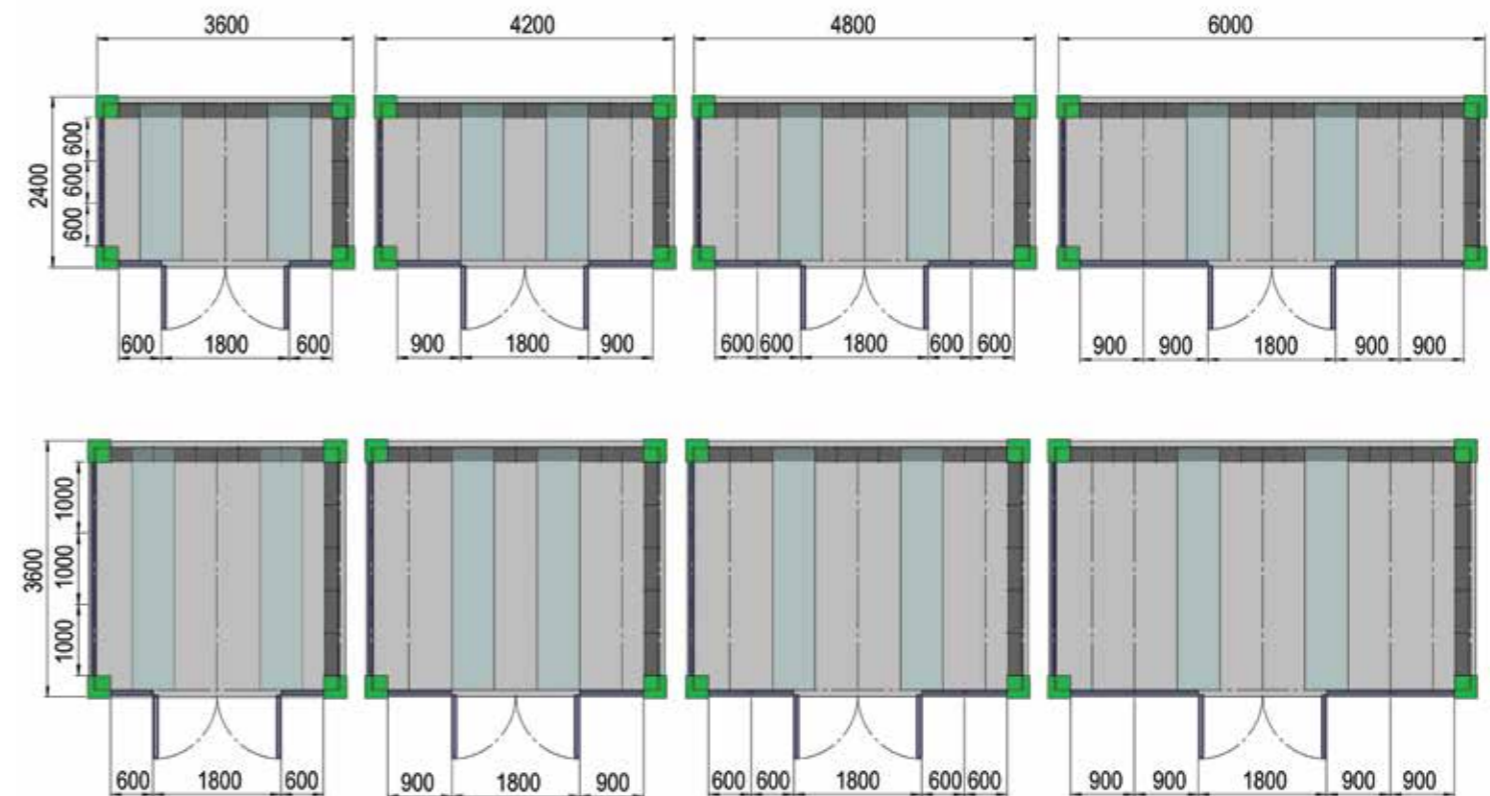


**3 full walls**  
Windows and doors to the front

Window Configuration shown is our preferred option, other configurations are possible.

## Layouts

The right hand corner suggested layouts below are shown here with fixed rooflights. Please note the rooflight positions are fixed.



## Key:

- Wall panels
- Glazed walls
- Fixed rooflights
- Insulated roof panels
- Insulated corner columns



# The Pavilion

The Pavilion makes a more traditional statement with the look and feel of an orangery. Spacious in design, The Pavilion has the option for 4 fixed rooflights to bring more natural light to the Garden Room.

## Key Features

- Double hipped Georgian roof with 4 optional fixed rooflights
- Fixed 25° pitch - 3600mm x 3600mm is 25° pitch (front and back) and 30° pitch (on each end)
- 2 tier flat fascia – anthracite grey
- 4 corner columns clad in anthracite grey aluminium

## Sizes

- Projection: 2400mm or 3600mm
- Width: 3600mm, 4200mm, 4800mm, 6000mm

**Design options:** There are 3 different design options for The Pavilion



**Right hand corner**  
2 walls, full height glazing on left hand side, doors and windows to front



**Left hand corner**  
2 walls, full height glazing on right hand side, doors and windows to front



**3 full walls**  
Windows and doors to the front



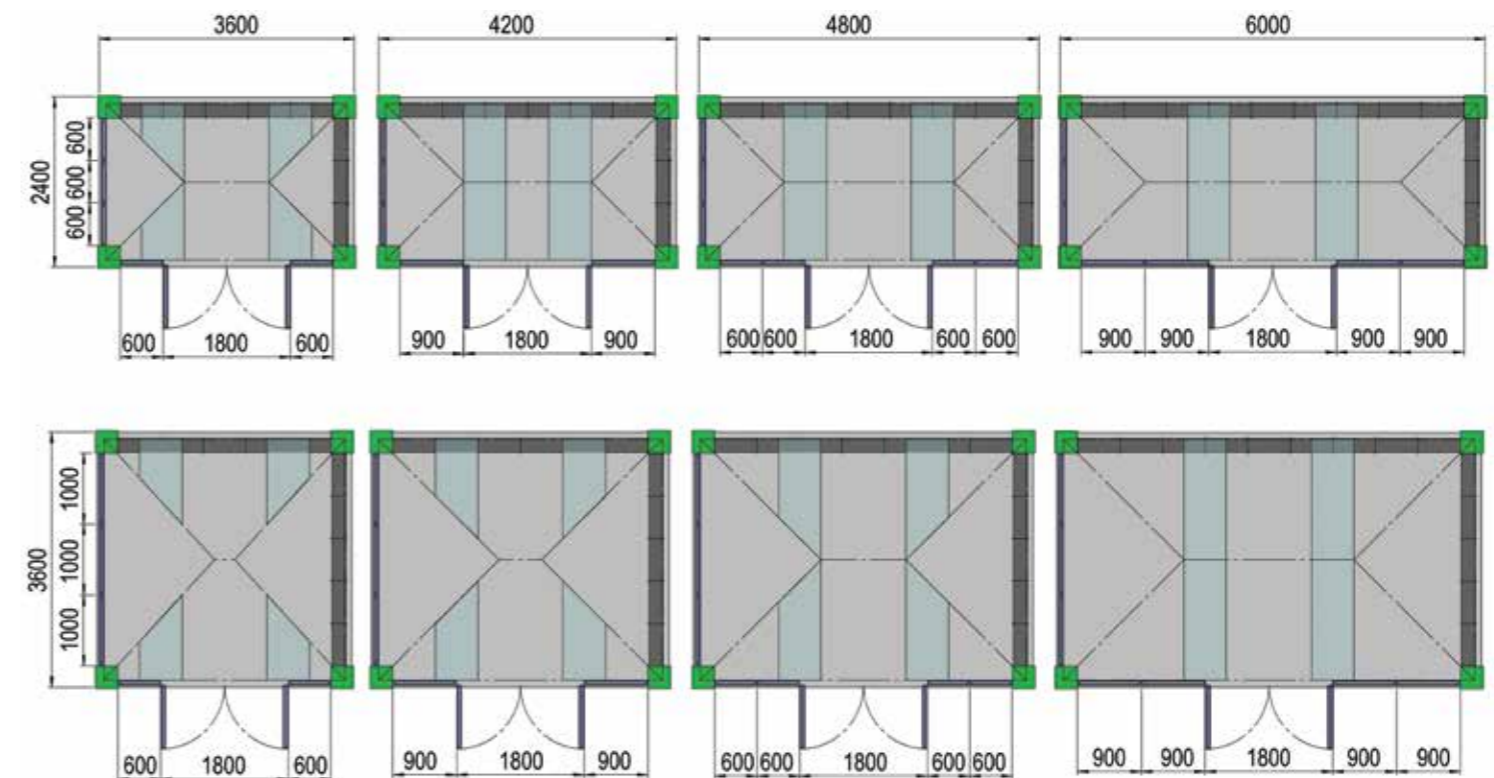
**Solid roof with no fixed rooflights**



**4 fixed rooflights**  
Supplied glazed or unglazed

## Layouts

The right hand corner suggested layouts below are shown here with fixed rooflights. Please note the rooflight positions are fixed.



## Key:

- Wall panels
- Glazed walls
- Fixed rooflights
- Insulated roof panels
- Insulated corner columns



# The Premium Pavilion

Even more special than our standard Pavilion, the Premium Pavilion uses inline insulated columns to break up the side elevations with windows. These columns not only make a style statement but add thermal performance, ensuring The Pavilion retains heat really well even in cold temperatures.

## Key Features

- Double hipped Georgian roof with 4 optional fixed rooflights
- Fixed 25° pitch - 3600mm x 3600mm is 25° pitch (front and back) and 30° pitch (on each end)
- Inline columns and full height glazing on the sides (1 column per elevation on the 2400mm projection and 2 columns on the 3600 projection)
- 2 tier flat fascia – anthracite grey
- 4 corner columns clad in anthracite grey aluminium

## Sizes

- Projection: 2400mm or 3600mm projection
- Width: 3600mm, 4200mm, 4800mm, 6000mm

**Design options:** There are 3 different design options on The Premium Pavilion



**Right hand corner**  
2 walls, full height glazing with in line columns on left hand side, doors and windows to front



**Left hand corner**  
2 Walls, full height glazing and in line columns on right hand side, doors and windows to front



**1 full back wall**  
1 full back wall and 3 glazed walls, with inline columns to both sides



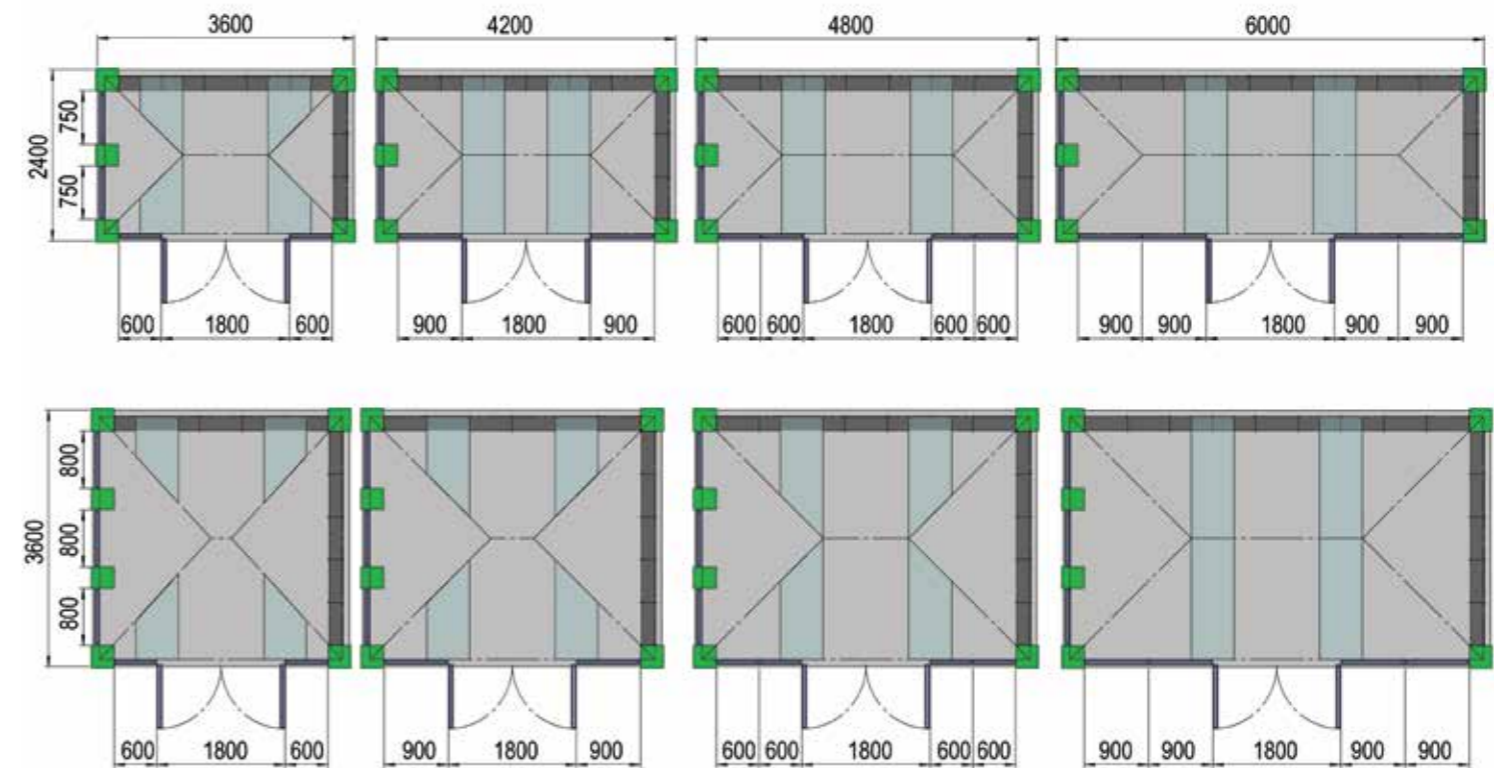
**Solid roof with no fixed rooflights**



**4 fixed rooflights**  
Supplied glazed or unglazed

## Layouts

The right hand corner suggested layouts below are shown here with fixed rooflights. Please note the rooflight positions are fixed.



## Key:

- Wall panels
- Glazed walls
- Fixed rooflights
- Insulated roof panel
- Insulated corner columns & insulated inline columns

# Specification Guide

## Walls

The Garden Room walls are made from Ultraframe's patented wall panels that deliver a U-Value of 0.17 which is the most energy efficient garden room wall on the market.

The unique hybrid design of structural insulation combined with an i-beam structure of galvanised steel and treated timber ensures the walls are both warm and structurally strong.

The wall panels easily slot into a floor tray which is screwed to the concrete pad. The wall panels are easily clipped together in minutes giving you a rapid Garden Room installation.

The walls are supplied with breathable membrane and battens ready for cladding.

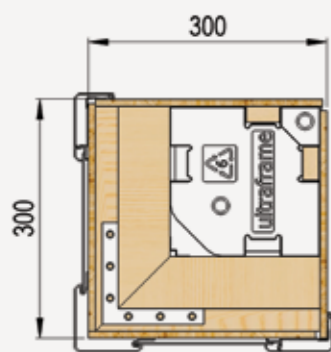


## Insulated columns

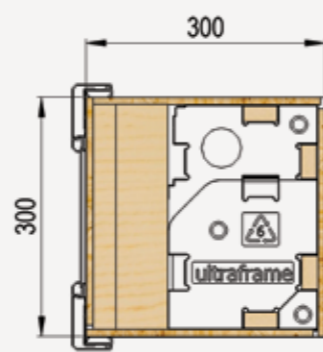
Engineered insulated corner columns give the Garden Room inner strength, solidity and warmth.

Internally the super-insulated core makes these columns 5 times more thermally efficient than similarly sized brick columns and externally they are powder coated in RAL 7016 anthracite grey to perfectly match the fascia.

The inline columns used on the sides of The Premium Pavilion create a style statement and improve energy efficiency too.



Corner column



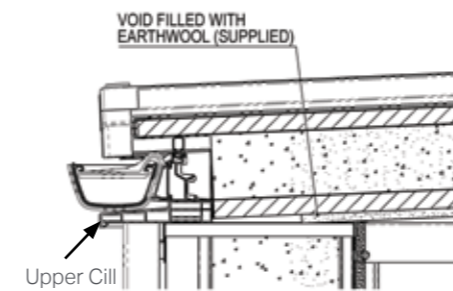
Inline columns – Premium Pavilion only

## Roof

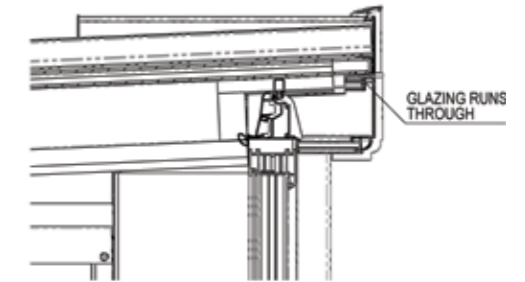
Our insulated solid roof is ideal for Garden Rooms. Externally, the roof is finished in RAL 7016 anthracite grey and glazed with insulated composite panels. Internally, it uses two separate insulation layers.

At the eaves on The Pavilion, the insulated internal pelmet engineered steelwork ladder system is used - all internal roof surfaces are then boarded (see page 18). The roof has an energy efficient U-Value of 0.15W/m2k.

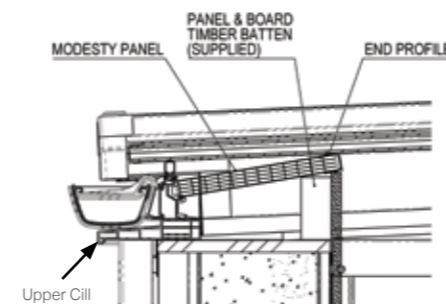
## The Studio



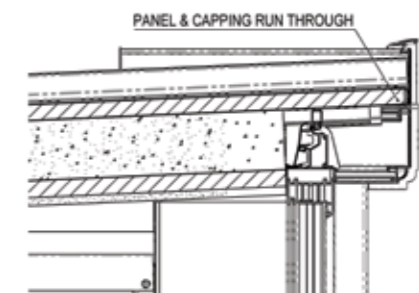
Rear wall to roof



Front to fixed rooflights detail



Rear wall to fixed rooflights

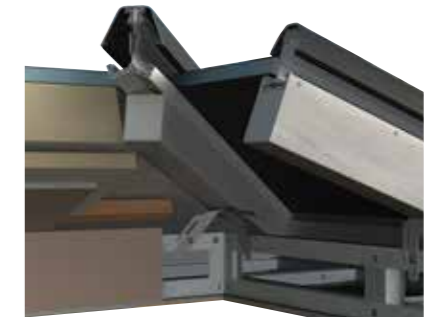


Front frame to roof

## The Pavilion



Fixed rooflights to eaves beam



Hip to eaves beam



## Glass

Ultraframe Garden Rooms with rooflights can be supplied with glass or unglazed.

Specification is as follows:

- U-Value 1.2
- Light transmission 42%
- Solar rejection 60%
- UV protection 83%
- Toughened to BS EN 12150-1
- Manufactured to BE EN 1279-2
- 10 year guarantee
- Self clean
- Argon cavity filled
- Warm edge spacer
- 24mm
- Blue

### Glass Area (m<sup>2</sup>)

If you are supplying your own glass, the total area of glass is shown below to help you cost each project.

Studio	3600	4200	4800	6000	Pavilions	3600	4200	4800	6000
2400	2.58	2.58	2.58	2.58	2400	2.10	2.88	2.88	2.88
3600	3.96	3.96	3.96	3.96	3600	3.19	3.62	4.30	4.40

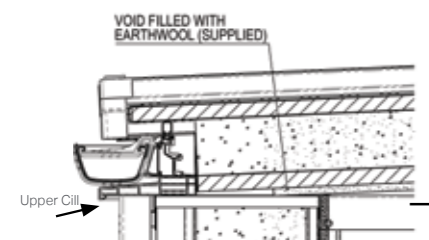
## Cill dimensions

A cill is required around the base of each Garden Room - we recommend 30mm x 150mm with welded corner joints and splits and jointers on the straight run. An upper cill is required for The Studio and The Tall Studio only. This is required on three sides (both side elevations plus the back wall).

Cill Internal Dimensions					
Projection	Width	The Studios & The Pavilions		The Studios Only- Upper cills	
		Internal Width	Internal Projection	Internal Width Upper	Internal Projection
2400	3600	3402	2202	3402	2005
	4200	4002		4002	
	4800	4602		4602	
	6000	5802		5802	
3600	3600	3402	3402	3402	3205
	4200	4002		4002	
	4800	4602		4602	
	6000	5802		5802	

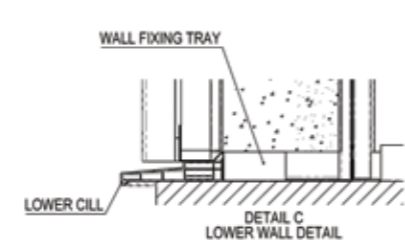
### The Studios

Rear wall to roof

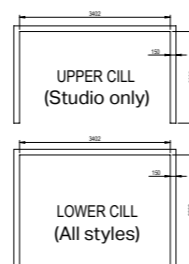


### The Studios and The Pavilions

Lower wall detail



### Cill details



**Total cill lengths:** The tables below show the total length of cill required for each of the building types in mm. Please note the Studio dimensions include both the lower and upper cills.

Total Studio Cill Length Required (M) includes upper cill				
	3600	4200	4800	6000
2400	18.62	20.42	22.22	25.82
3600	23.42	25.22	27.02	30.62

Total Pavilion Cill Length Required (M)				
	3600	4200	4800	6000
2400	11.21	12.41	13.61	16.01
3600	13.61	14.81	16.01	18.41

## Fascia

The 2 tier flat fascia hides end caps to give the roofline a neat finish. Aluminium and powder coated in RAL 7016 anthracite grey, the fascia matches the insulated columns and roof perfectly.



2 tier flat fascia

## Claddings

Whilst Ultraframe doesn't provide claddings, the wall panel is compatible with many cladding options available on the market.

We recommend that you use RAL 7016 anthracite grey external claddings to match our anthracite grey finish. We found the Marley Cedral® claddings in Slate Grey to be a great match. Each Marley Cedral Cladding board is 190mm x 3600mm.



Cedral lap

Wall prepared for cladding - battens supplied.

### External cladding dimensions

For each elevation the dimensions of the area to be cladded are shown below:

#### The Studios

Elevation Length	External Cladding Area on Each Elevation					
	The Studio			The Tall Studio		
	Width	2400 proj	3600 proj	Width	2400 proj	3600 proj
	Height			Height		
2400	1792	2010	1958	1792	2390	2338
3600	2992			2992		
4200	3592			3592		
4800	4192			4192		
6000	5392			5392		

#### The Pavilions

Elevation Length	External Cladding Area	
	The Pavilion	
	Width	Height
2400	1792	2139
3600	2992	
4200	3592	
4800	4192	
6000	5392	

### Total areas (m<sup>2</sup>) needed to be covered by external claddings

The external cladding area of each Garden room design has been calculated for you below:

Small Studio 2 walls				
	3600	4200	4800	6000
2400	9.62	10.82	12.03	14.44
3600	11.87	12.89	14.07	16.42

Small Studio 3 walls				
	3600	4200	4800	6000
2400	13.22	14.42	15.63	18.04
3600	17.58	18.75	19.92	22.27

Tall Studio 2 walls				
	3600	4200	4800	6000
2400	11.43	12.87	14.30	17.17
3600	13.99	15.39	16.80	19.60

Tall Studio 3 walls				
	3600	4200	4800	6000
2400	15.72	17.15	18.58	21.45
3600	20.99	22.39	23.79	26.60

Pavilion 2 walls				
	3600	4200	4800	6000
2400	10.23	11.52	12.80	15.37
3600	12.80	14.08	15.37	17.93

Pavilion 3 walls				
	3600	4200	4800	6000
2400	14.07	15.35	16.63	19.20
3600	19.20	20.48	21.77	24.33

Premium Pavilion 2 walls				
	3600	4200	4800	6000
2400	10.23	11.52	12.80	15.37
3600	12.80	14.08	15.37	17.93

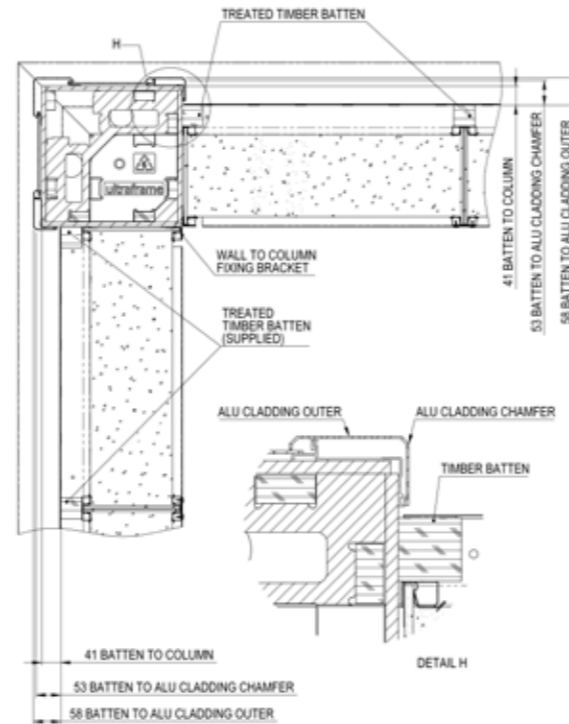
Premium Pavilion Back wall only				
	3600	4200	4800	6000
2400	6.40	7.68	8.97	11.53
3600	6.40	7.68	8.97	11.53

The m<sup>2</sup> areas above are areas to be covered only and do not include a waste factor.

## Cladding Set-outs

The diagram to the right shows the layout of the columns and battens so you can see how your own claddings will look relative to the column claddings.

Claddings must be between 10mm and 53mm in thickness.



## Internal boarding

We recommend you avoid plastering if possible to help prevent any damp issues if the room is left unheated.

We found that fermacell offers a good dry lining alternative solution that minimises wet trades on site, increases design flexibility and speeds up the build time.

### Areas (m<sup>2</sup> needed to be covered by internal board)

#### The Studio

	3600	4200	4800	6000
2400	15	16	17	20
3600	24	26	28	32

	3600	4200	4800	6000
2400	21	23	26	31
3600	30	33	36	43

The Studio - left or right hand corner

The Small Studio - 3 walls

#### The Tall Studio

	3600	4200	4800	6000
2400	16	18	18	21
3600	26	28	30	34

	3600	4200	4800	6000
2400	23	26	29	34
3600	33	37	40	47

The Tall Studio - left or right hand corner

The Tall Studio - 3 walls

#### The Pavilion

	3600	4200	4800	6000
2400	20	40	40	40
3600	30	40	40	40

	3600	4200	4800	6000
2400	30	50	50	50
3600	30	50	50	50

The Pavilion - left or right hand corner

The Pavilion - 3 walls

#### The Premium Pavilion

	3600	4200	4800	6000
2400	20	40	40	40
3600	30	40	40	40

	3600	4200	4800	6000
2400	10	20	20	20
3600	10	20	20	20

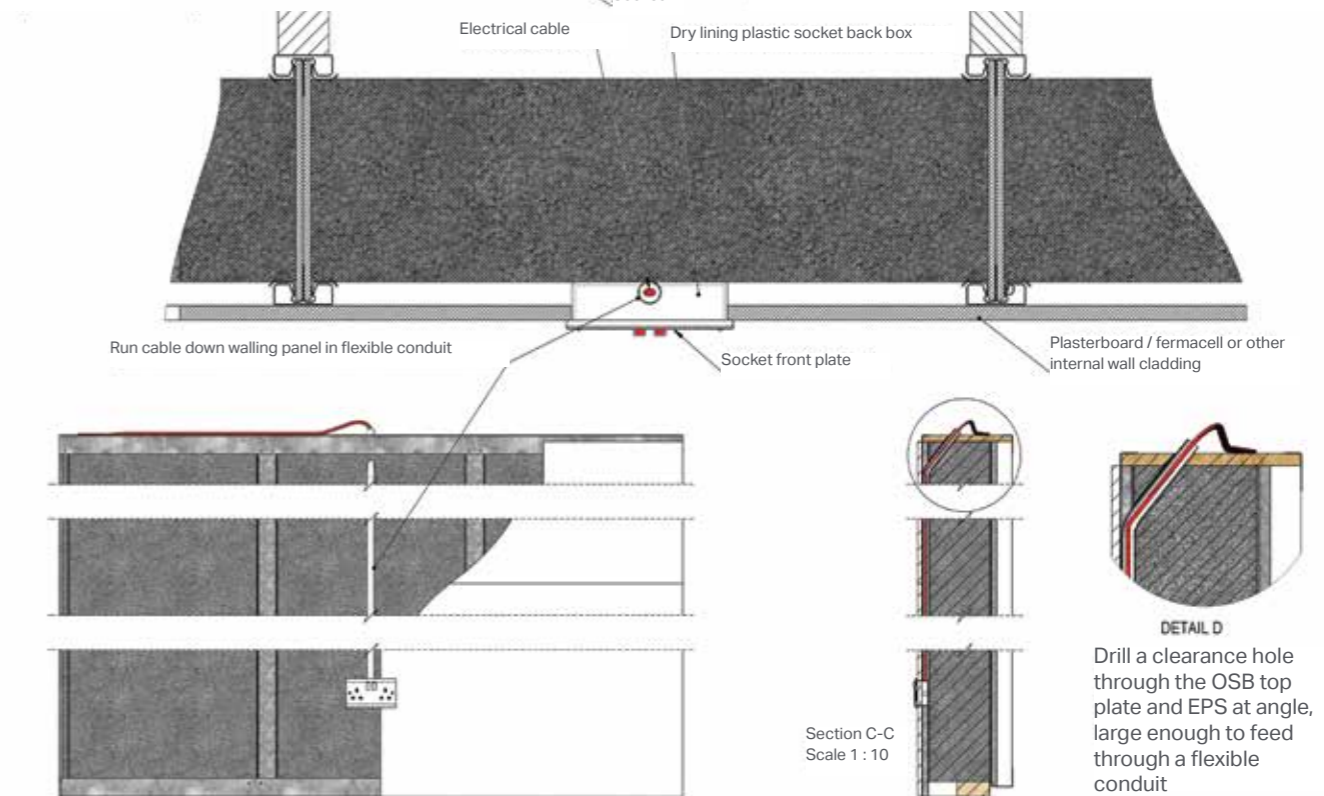
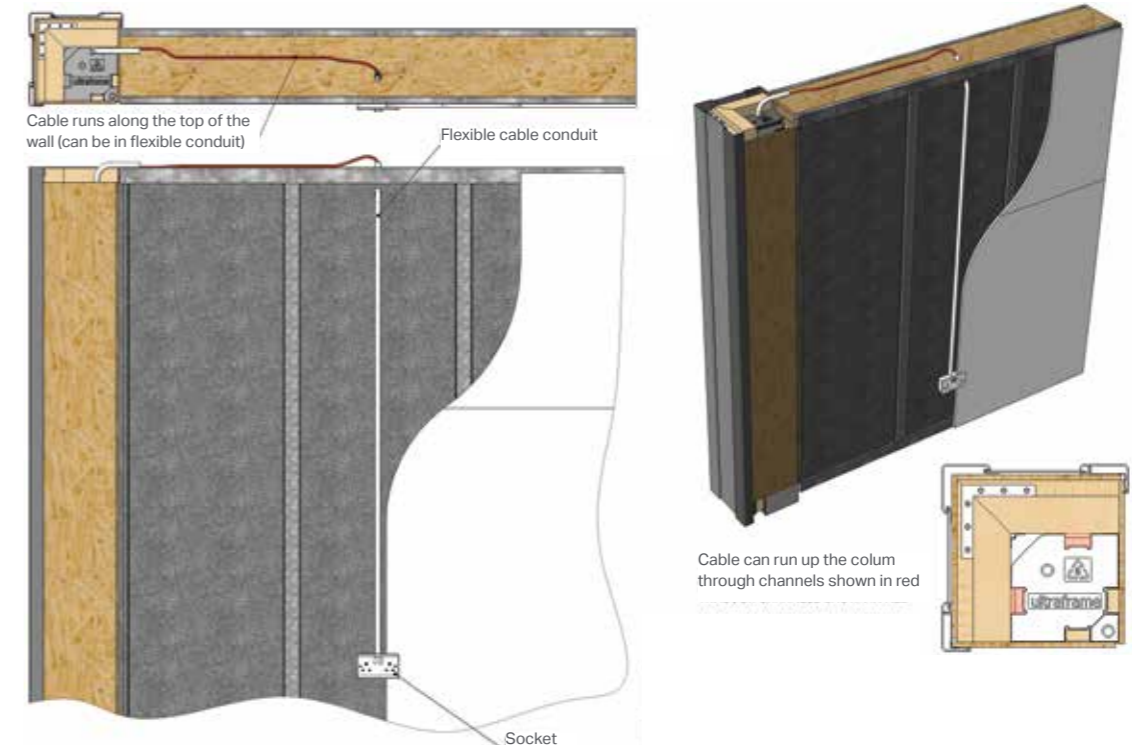
The Premium Pavilion - left or right hand corner

The Premium Pavilion - Back wall

The above areas are the areas to be covered rounded up to the nearest square metre and do not include any additional waste factor

## Electrics

As a suggestion you can run a cable up or down the column as indicated below and along the top of the wall, do this as part of the first fix electrics. **The cable needs to run in conduit, you must not let cabling come into direct contact with the EPS.** The conduit is readily available from any builders merchant. Consult and use a qualified "Part P" electrician prior to attempting electrical installations.



**DISCLAIMER: WIRING PVC SHEATHING SHOULD NOT COME INTO CONTACT WITH THE EPS. RUN WIRING INSIDE CONDUIT TO PREVENT CONTACT.**



## Lighting

We always recommend that electrics and cabling are run in a flexible conduit, you must not let cabling come into direct contact with the EPS or roof insulation. The first fix cabling can be run into the Garden Room and along the top of the wall (as shown on page 19) and then directed to the location of the required light up the sides of the roof bars with enough cable to access through the internal boarding once fitted. Low energy and low heat lighting is recommended.

### The Studio

We recommend slim surface mounted LED lights, wall mounted up/down lighters or perimeter channel LED light strips. Determine the location of the lights before the insulation is fitted. The cabling, which must be in flexible conduit and not come into contact with the insulation, should run along the top of the wall and up the bars adjacent to where the light will be fitted.



### The Pavilion

We recommend that low energy, low heat LED lighting is fitted in the internal pelmet or the internal ridge board, or surface mounted fittings on either the ceiling or walls.

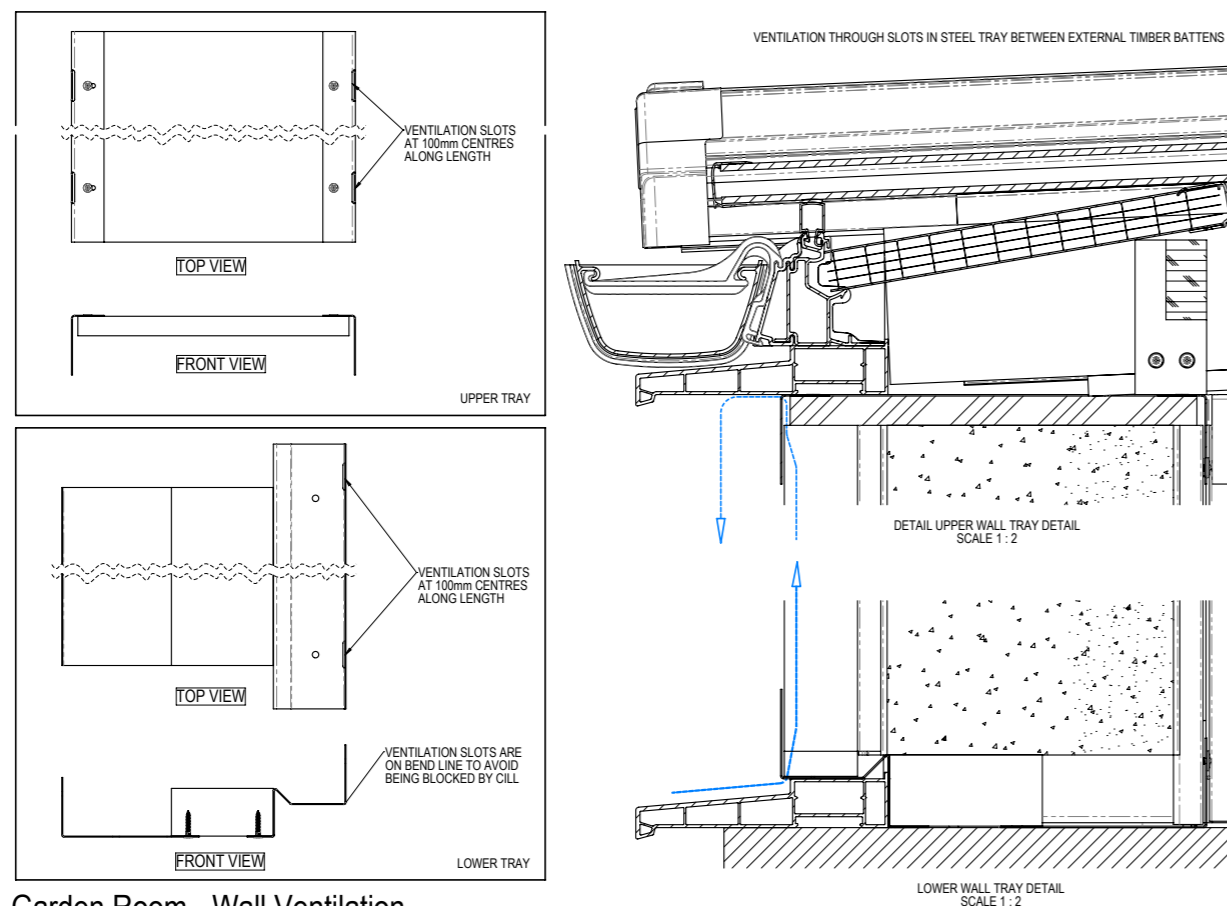
In all circumstances consult and use a qualified "Part P" electrician prior to fitting your chosen light fittings and sockets.



## Ventilation for Claddings

The diagram below explains how the wall panels are designed to allow sufficient airflow around claddings.

You will need to refer to your cladding technical guide for the ventilation requirements specific to the claddings which you are using.



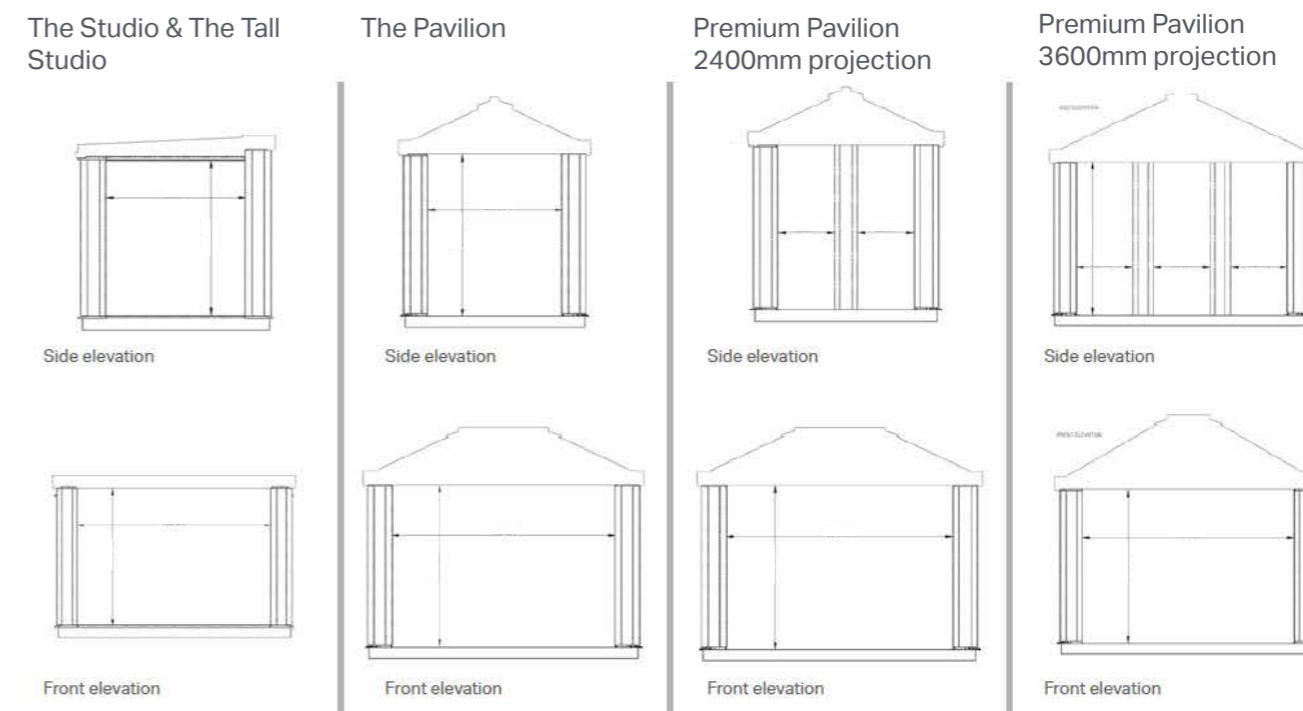
Garden Room - Wall Ventilation (Studio Garden Room Shown, the same detail applies to Pavilion)

## Window and Door Apertures

This section helps you design your window and door layout and order the right size frames. The diagrams below show the aperture layout where you can place your windows and doors.

The aperture width inside the columns is 594mm narrower than the external base size on each elevation. The figures shown in the table below include a 6mm overall deduction in width to allow a frame tolerance allowance and ensure good coverage from the corner column claddings. The aperture height is an overall (tight size) height from the underside of the lower cill to the underside of the upper cill. The upper cill (on Studios only) is considered part of the roof and sits above this aperture.

### Window Frame Aperture Layout



The table below are actual frame sizes required.

Projection	Width	The Studio				The Tall Studio				The Pavilion				The Pavilion Premium	
		Front Elevation		Side Elevation		Front Elevation		Side Elevation		Front Elevation		Side Elevation		Side Elevation	
		Height	Width	Height	Width	Height	Width	Height	Width	Height	Width	Height	Width	Width Between Inline Columns	
2400	3600		3000				3000			2170 (Inc cill)		3000	2170 (Inc cill)	1800	750
	4200	2170 (Inc cill)	3600	2040 (Inc cill)	1800	2550 (Inc cill)	3600	2420 (Inc cill)	1800		3600				
	4800		4200			4200					4200				
	6000		5400			5400					5400				
3600	3600		3000				3000			2170 (Inc cill)		3000	2170 (Inc cill)	3000	800
	4200	2170 (Inc cill)	3600	1989 (Inc cill)	3000	2550 (Inc cill)	3600	2369 (Inc cill)	3000		3600				
	4800		4200			4200					4200				
	5400		5400			5400					5400				

These aperture sizes include a 6mm deduction to allow for tolerances.

Further deductions are required to determine your frame sizes as outlined below. Details of the eaves support beam and goalposts can be found on page 22. The goalpost cross beam depth is either 171mm or 201mm depending on which size and style of Garden room you choose.

Deduction	Height (mm)	Width (mm)
Lower cill (30mm x 150mm recommended)	30	0
Eaves Support Beam (front elevation only)	70	0
Goalpost (runs inside columns and below eaves)	*171/201	106

\* See page 22-23 to determine which size goalpost is required

## Large Door Spans

If you wish to design bi-folds or sliding doors into an Ultraframe Garden Room, lateral stability risks and structural support must be considered.

Unless using a goalpost (which can be supplied by Ultraframe) 500mm windows on either side of each corner column must be always used to avoid any lateral stability issues.

Sliding doors can be used on both the side and the front elevation, however an eaves support beam must be used on the front elevation to take the extra load. All sliding door outer frames must be fully reinforced. Ensure the head of the outer frame is always installed level.

Bi-folding doors can be used, but will require a goalpost on both side and front elevations to manage lateral stability and support the load.

## Eaves Support Beam



Studio

Pavilion

When using sliding or smaller bi-fold doors on the front elevation an Eaves Support Beam must be used. This runs along the entire width of the elevation and can be supplied with grey or white internal claddings. The beam is 70mm deep and so this must be deducted from the window and door heights at the front (see page 21). If you wish to match this frame line on the sides of the Pavilion a 70mm packer can be used and frame height reduced.

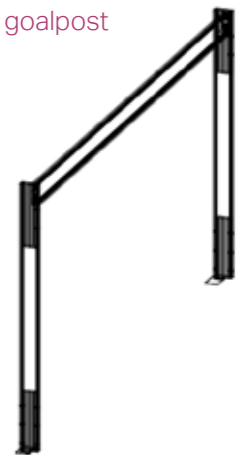
The Eaves Beam Support is only suitable for use on the front elevation.

## Structural Goalposts

Structural goalposts are needed when using large bi-folding doors both to support the roof and to avoid any lateral stability issues.

The maximum unsupported span of the structural goalpost is however shorter than the aperture width on 6000mm wide Garden Rooms. In this case a 4 legged goalpost can be used where the intermediate legs sit behind doors and windows, equidistant from the centre.

2 legged goalpost



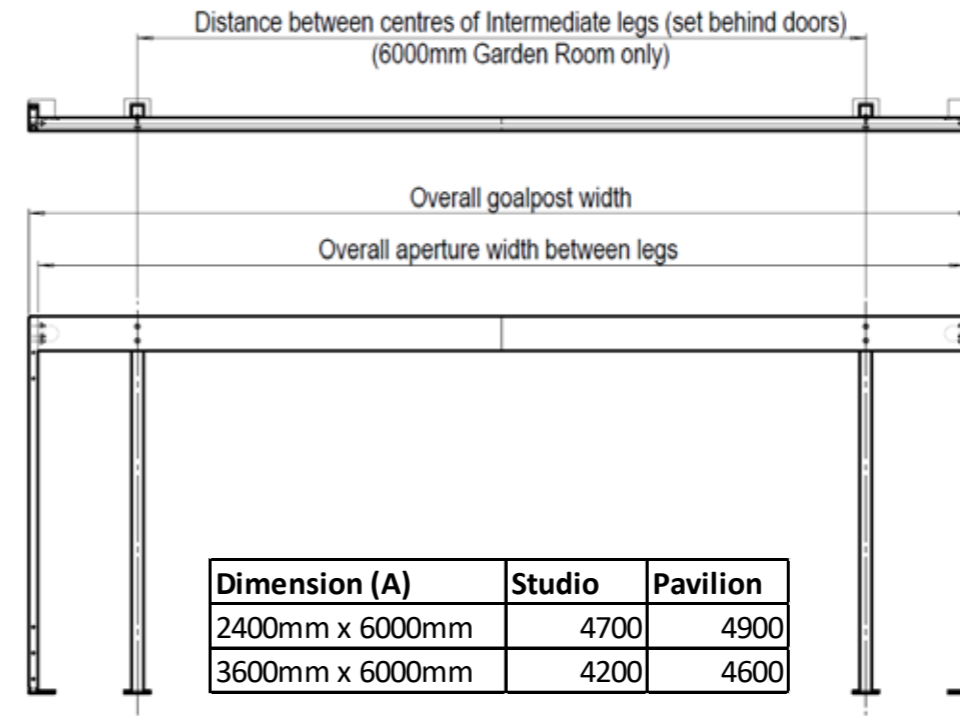
4 legged goalpost



The main vertical goalpost legs are 53mm wide each so a deduction of 106mm must be made for window/door widths. Intermediate legs (6000mm width only) do not require a deduction as they sit behind the door frame, however a deduction may be required for the chosen frame coupler. The depth of the goalpost cross beam varies depending on the size and style of garden room outlined below. These dimensions must be deducted from the window and door sizes shown on page 21.

Studio	3600	4200	4800	6000
2400	171	171	201	201
3600	171	201	201	201

Pavilion	3600	4200	4800	6000
2400	171	171	201	201
3600	171	171	201	201



Dimension (A)	Studio	Pavilion
2400mm x 6000mm	4700	4900
3600mm x 6000mm	4200	4600

The 4 legged goalpost on the 6000mm wide garden rooms is designed with the intermediate legs centralised over the maximum span possible with this goalpost. This maximum span varies by Garden room design and is dimension (A) as outlined in the table below

## Maximum Door Spans

The maximum allowable door span on each elevation is dependent on the maximum span of the eaves beam or goalpost, the deductions taken for columns, goalposts and the 500mm windows required (to avoid lateral stability issues) either side of the corner columns which are required on all garden rooms unless using a goalpost.

Front Elevation - Maximum Openings (Door spans in mm)						
Garden Room Base Size		Frame sizes after column deduction	Standard	With Bi-fold support		Goalpost
Projection	pWidth	Total Aperture length	Max Door Span	Max Door Span (5mm deflection)	Max Door Span (7mm deflection)	Max Door Span after 106mm deduction for vertical posts. (tight size)
2400	3600	3000	1800	2000	2000	2894
2400	4200	3600	1800	2600	2600	3494
2400	4800	4200	1800	3080	3200	4094
2400	6000	5400	1800	3080	3351	4700 (Studio) 4900 (Pavilion)*
3600	3600	3000	1800	2000	2000	2894
3600	4200	3600	1800	2600	2600	3494
3600	4800	4200	1800	2780	3028	4094
3600	6000	5400	1800	2780	3028	4200 (Studio) 4600 (Pavilion)*

The table below shows the maximum possible doors sizes on each side elevation.

Door Options on Side Elevation (maximum spans in mm)			
Projection	Standard (needs 500mm windows at corners for lateral stability)	2 pane slider (can fill entire aperture)	Bi-folds with goalpost (can fill entire aperture)
2400	800	1800	1694
3600	2000	3000	2894

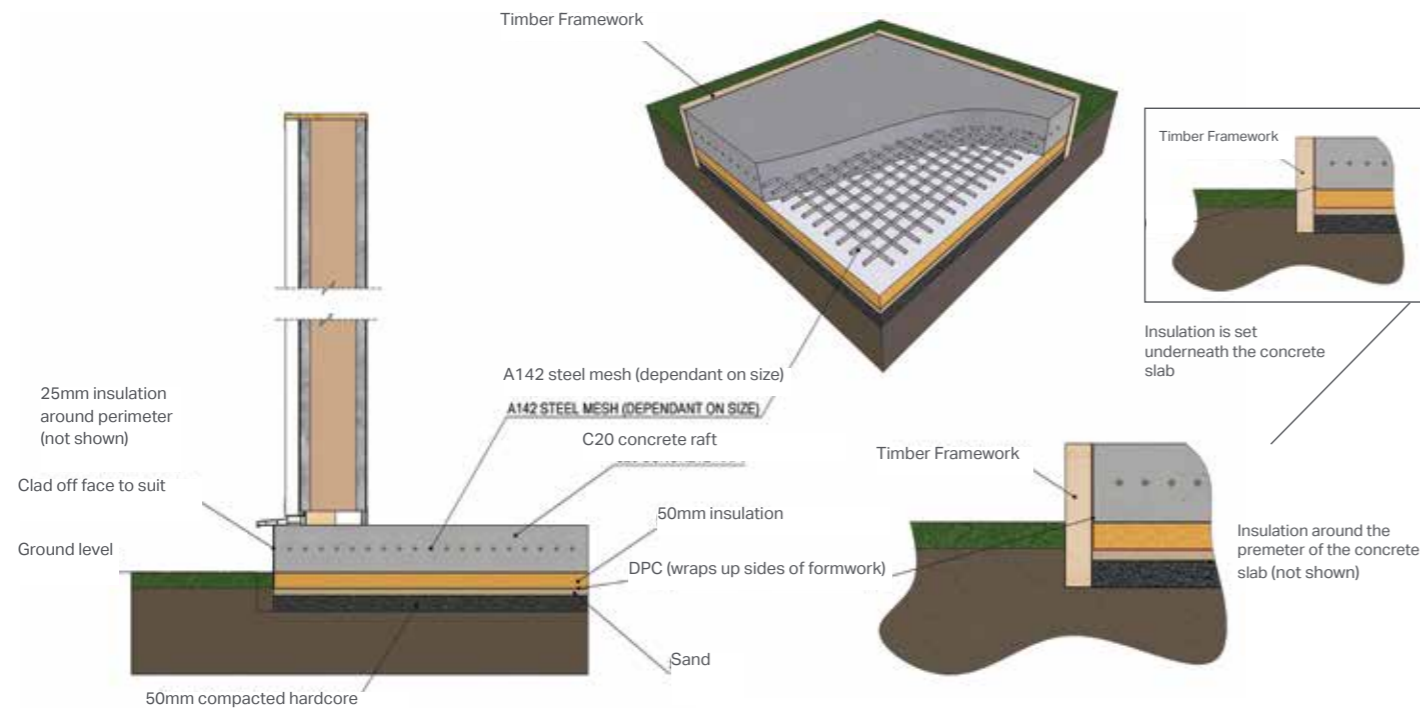


## Bases

We recommend a 150mm insulated slab in order to avoid rising damp from the ground and ensure a solid foundation for the Garden Room. 150mm has been selected so that the overall height of The Studio does not exceed the 2500mm height required to avoid planning permission.

The timber formwork is a temporary shuttering into which the concrete is poured. Once the concrete has set, the formwork is removed. The sequence for the base is as follows:

1. Excavate the area slightly larger than the Garden Room overall sizes.
2. Build timber formwork to the size of the Garden Room (inside dimensions of formwork), ensuring square (check diagonals).
3. If insulating around perimeter of slab, take the insulation thickness into consideration for the overall size.
4. Fill the base of the foundation with hardcore and compact.
5. Add a layer of sand and compact. Fit DPC to cover the area and lap up the sides of the formwork.
6. Insert 50mm sheet insulation.
7. Pour C20 concrete raft (depending on area an A142 steel mesh will be required)
8. Once fully set, the Garden Room installation can be carried out.



## Bases

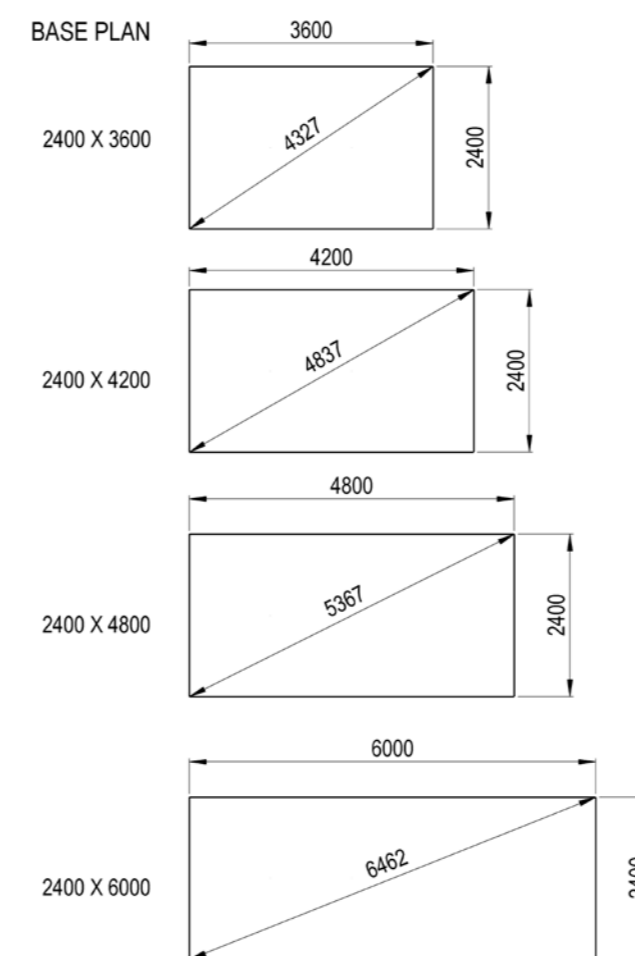
### External Base Size

2400mm x 3600mm	2400mm x 4200mm	2400mm x 4800mm	2400mm x 6000mm
3600mm x 3600mm	3600mm x 4200mm	3600mm x 4800mm	3600mm x 6000mm

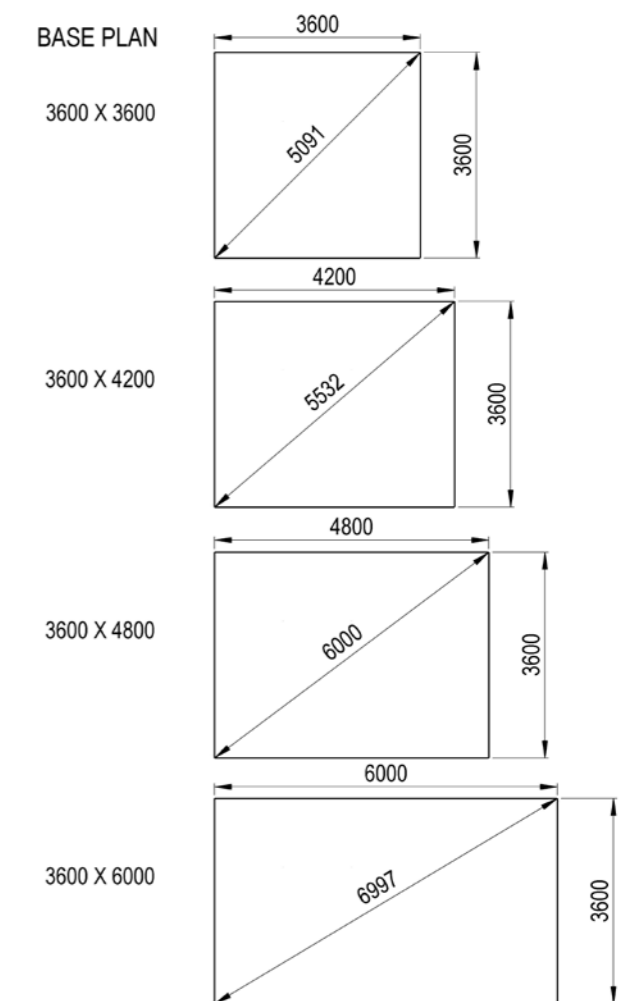
### Internal Floor Size

1800mm x 3000mm	1800mm x 3600mm	1800mm x 4200mm	1800mm x 5400mm
3000mm x 3000mm	3000mm x 3600mm	3000mm x 4200mm	3000mm x 5400mm

### Base plan 2400mm projection



### Base plan 3600mm projection

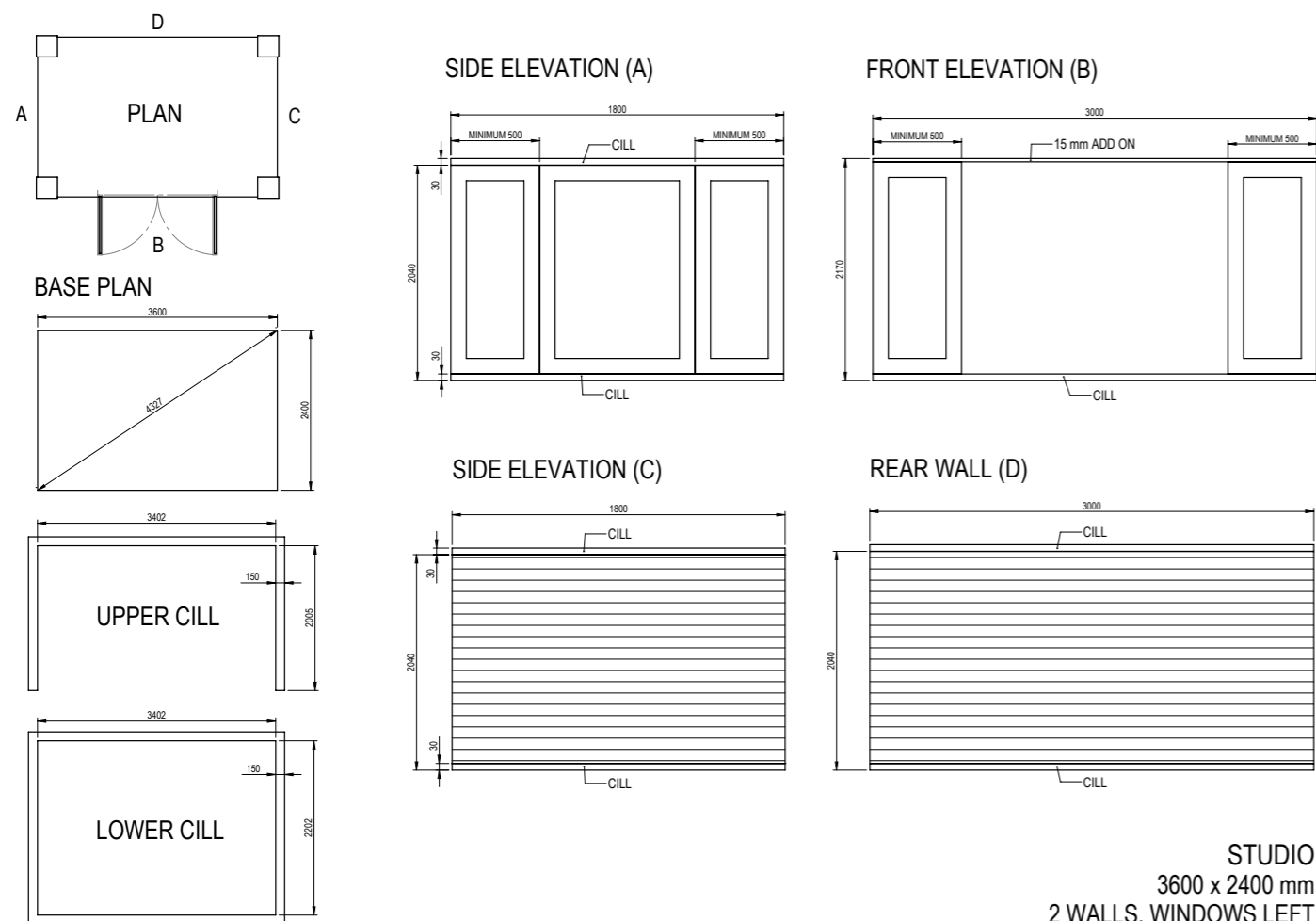


## How to calculate your materials required?

To help you calculate the materials required for each job, we will provide details of critical dimension on your order confirmation.

In this section we have used the example of a Studio (2400mm x 3600mm with a bi-fold support beam) to demonstrate how you can calculate the other materials required to assemble the Garden Room. This page shows you the order confirmation and the following pages show you how to refer to the guide to build a materials list.

### Order confirmation details: Right hand corner studio 2400 x 3600mm



## How to calculate your materials required?

How to calculate materials using this guide.

### Base

The measurements below indicate the overall projection x width sizes from page 25. The diagonal check dimension to ensure that the base is square is also provided on the confirmation report. In this case 4327mm.

### External Base Size

2400mm x 3600mm	2400mm x 4200mm	2400mm x 4800mm	2400mm x 6000mm
3600mm x 3600mm	3600mm x 4200mm	3600mm x 4800mm	3600mm x 6000mm

### Cill

The cill measurements below use the internal width and internal projection calculations taken from the table on page 16. The recommended minimum cill is 150mm, however by using the internal frame dimension allows for slightly larger cills if required. For the Studio, there is an upper and lower cill. The upper cill is a 'C' shape on 3 sides of the structure. The total cill length required is 18.62m<sup>2</sup>.

Total Studio Cill Length Required (M) includes upper cill				
	3600	4200	4800	6000
2400	18.62	20.42	22.22	25.82
3600	23.42	25.22	27.02	30.62

### Window & Door Apertures

To calculate the window apertures, chose your Garden Room projection and width from the left-hand columns of the table on page 20. To find out the required apertures for the different elevations, based on the Garden Room type, cross reference the size with type and elevation.

In this case the front elevation would be 3000mm wide and 2070 tall after deducting 70mm for the Eaves Support Beam and 30mm for the bottom cill. The side elevation would be 1800 wide and 2010 high after the 30mm deduction for the bottom cill.

Projection	Width	The Studio				The Tall Studio				The Pavilion				The Pavilion Premium
		Front Elevation		Side Elevation		Front Elevation		Side Elevation		Front Elevation		Side Elevation		Side Elevation
		Height	Width	Height	Width	Height	Width	Height	Width	Height	Width	Height	Width	Width Between Inline Columns
2400	3600	2170	3000	1800	2550	3000	2420	1800	2170	3000	2170	1800	750	
	4200		3600			3600								
	4800		4200			4200								
	6000		5400			5400								
3600	3600	2170	3000	3000	2550	3000	2369	3000	2170	3000	2170	3000	800	
	4200		3600			3600								
	4800		4200			4200								
	5400		5400			5400								

Please note: There values are total aperture sizes and do not include any deductions for frame add-ons on the lower cill. The Studios require an upper cill which sits above these apertures. Please note that when a eaves support beam is specified, a 70mm de-duction is required off the front elevation frame height.



# How to calculate your materials required?

## Claddings

The external cladding area is 9.62m<sup>2</sup> shown in the table below. A waste factor will need to be added e.g with 10% waste factor it would be 10.56m<sup>2</sup>.

### The Studios

Elevation Length	External Cladding Area on Each Elevation					
	The Studio			The Tall Studio		
	Width	2400 proj	3600 proj	Width	2400 proj	3600 proj
	Height			Height		
2400	1792	2010	1958	1792	2390	2338
3600	2992			2992		
4200	3592			3592		
4800	4192			4192		
6000	5392			5392		

### The Pavilions

Elevation Length	External Cladding Area	
	The Pavilion	
	Width	Height
2400	1792	2400 Width
3600	2992	2139
4200	3592	
4800	4192	
6000	5392	

## Internal boardings

The table on page 18 shows that a total of 14.30m<sup>2</sup> of internal boarding is required for a right hand corner The Studio. A waste factor will need to be added e.g. with 10% waste it would be 1573m<sup>2</sup>.

### The Studio

	3600	4200	4800	6000
2400	14.30	15.60	16.80	19.30
3600	23.23	25.23	27.13	31.13

# ORDER FORM

### Contact details:

partsales@ultraframe.co.uk OR 01200 452 906

ORDER

QUOTE

ACCOUNT No.

Company Name .....

Order Number .....

JOB REFERENCE .....

Company Contact .....

Telephone No. ....

Email .....

Delivery Address .....

.....

.....

POSTCODE .....

Delivery Date Req .....

Quotation Ref .....

Delivery To Site Req  Yes  No

### HOW TO PLACE AN ORDER FOR GARDEN ROOM

#### LAYOUT

1. The Studio



2. The Tall Studio



3. The Pavilion



4. The Premium Pavilion



### DESIGN

STUDIO  Studio  Tall Studio

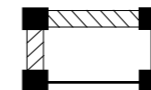
PAVILION  Pavilion  Premium Pavilion

FIXED ROOFLIGHTS  Yes  No

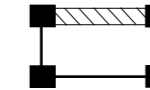
If YES to fixed rooflights:  Conservaglass Standard Blue  Unglazed (24mm)

### LAYOUT

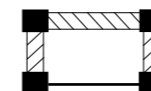
Left Hand Corner with two solid walls



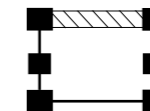
Right Hand Corner with two solid walls



3 Walls



1 solid back wall and both sides with inline columns (Premium pavilion only)



KEY	
Super-Insulated Column	
Walls	
Windows/ Doors	
Inline Column	

### SIZE

PROJECTION  2400mm  3600mm

WIDTH  3600mm  4200mm  4800mm  6000mm

COLOUR OF FRAMES (External/ Internal)  Grey/Grey  Grey/White

BI-FOLD SUPPORT BEAM REQUIRED (Only available for the front elevation)  Yes  No

STRUCTURAL GOALPOST REQUIRED Front  Left Hand Side  Right Hand Side

Job No.:3598

Please sign and return to

partsales@ultraframe.co.uk

SIGNED .....

DATE .....





# Gardenrooms

By Ultraframe

[ultraframegardenrooms.com](http://ultraframegardenrooms.com)

Job No. 7085 Code: GRSG001 GR Spec Guide 07/22

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We have been trading for over 35 years and strive to deliver unrivalled quality and service.