





Full Glass Roofs
System Overview and Design Guide
July 2014 | V2

INTRODUCTION AND OVERVIEW

The conservatory that thinks it's an extension. Welcome to the Livin room

The Liv<u>in</u>Room uses the well proven Ultraframe Classic Glazed Roof at its heart and then adds an engineered framing system internally which is plastered to give a perimeter ceiling all the way round.

This creates something that is neither conservatory nor extension. It combines all the benefits of the former in terms of light and then fuses this with the solidity and feel of an extension. This effect can be played up or down depending on whether glazed walls or masonry walls are specified.

All of this can be achieved at a price point not dissimilar to that of a standard conservatory.



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Externally, this design features Cornice.

Product definition



An engineered steelwork ladder system that forms a framework relying only on the roof for support onto which plasterboard is screw fixed.



Consumer Benefits

- Enjoy the light from a conservatory with the feel of an extension
 providing greater overall value and the best of all worlds.
- Creates a whole new dynamic to the space a 'real room/living room' feel.
- You can maintain light and space by using windows all round OR have brick piers to give a greater sense of solidity.
- A holistic 10 year guarantee is issued to your chosen retailer.
- Better thermal efficiency when compared to a standard conservatory.
- This real room/living room feel means more styling and furnishing options and the perimeter ceiling is perfect for down lighters.

Trade Benefits

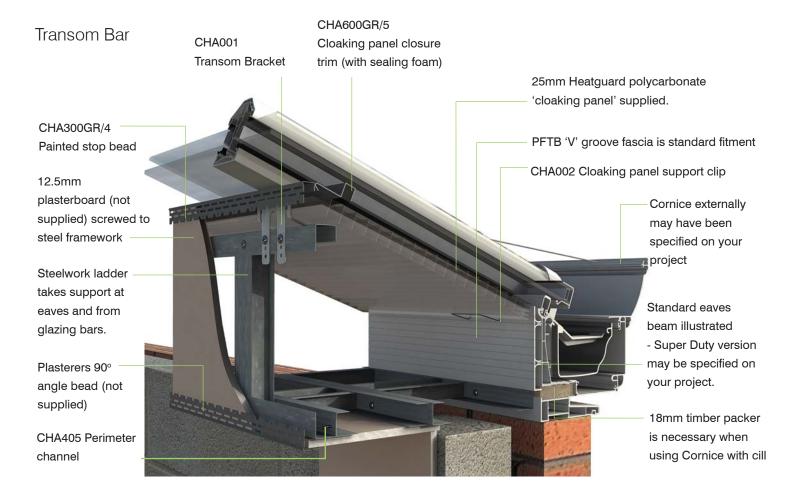
- As are all Ultraframe's products, Liv<u>in</u> Room was extensively tested in the R&D facilities at Head Office.
- This is a systemised approach, yet maintains flexibility for the retailer
- Steel work ladder framework and roof are integrated as the additional weight is accounted for in Ultraframe's U-Design software which up-specs roof according to postcode and loadings.
- Allows completion of the complete glazed roof externally and internally before steelwork ladder system is installed.
- Steelwork ladder framework system is supplied on the same lead time as the roof.



Key Performance Criteria

- Can be used from 15 40 degrees
- Steelwork ladder system extends from 300mm to 1200mm
- Datum point is internal side frame to external face of 12.5mm plasterboard.
- The system is not designed to carry additional suspended weight e.g. flatscreen tv's
- Can be used with standard eaves or Super Duty version with box gutters & bolsters and accommodates differential pitches across hips.
- If your chosen design features a box gutter, we strongly suggest you use a 30mm framepacker, which allows the plasterboard to run underneath the boxgutter for a neater finish.

PRODUCT OVERVIEW



Georgian Bolster Bar



Bolster Corner Infill

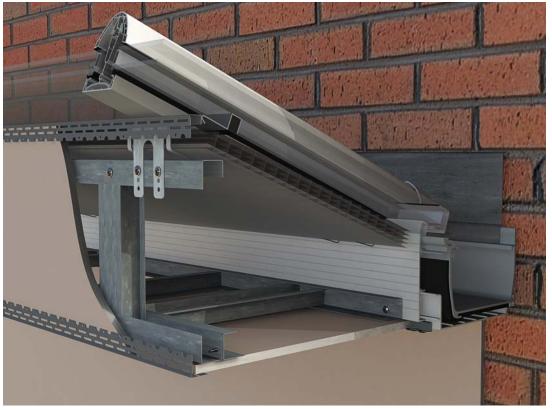
PRODUCT OVERVIEW

Box Gutter - with frame add on



Framework terminates on host wall.

Box Gutter - without frame add on (retro fit situation)



Framework terminates on fascia

PRODUCT OVERVIEW

Gable Frame Situation



If this is a new installation of Livin Room then the design of the gable frame should cover the 'open end' of the ladder framework. On retro fits where a redesign of the gable feature is not feasible, the application of a privacy film to the glass may suffice.

GALLOWS BRACKET PRE - PREPARATION

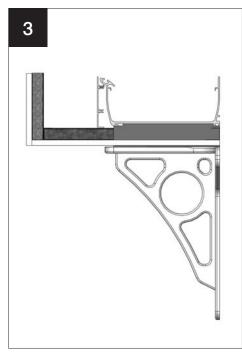
On an installation of roof and Livin Room you MUST have this situation when you arrive on site. Structurally, it is not permissible to insert this packer / spacer when the roof is already glazed

Packer / Spacer slips over



Finished installation - 165mm Box Gutter - 265mm

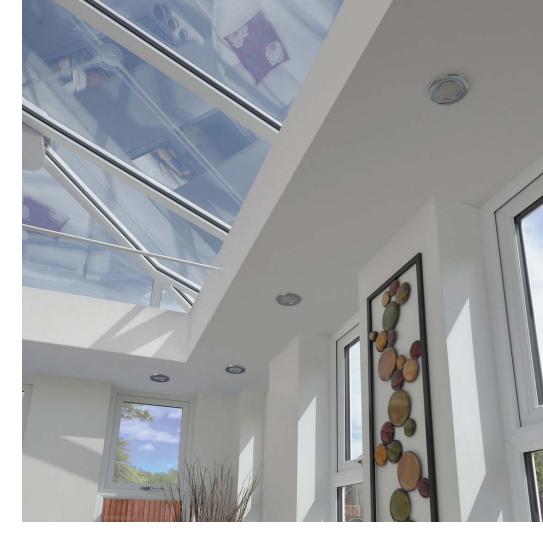




Lighting Layouts

Into the 12.5mm plasterboard, can be inset down lighters.

The ladder steelwork framework provides the perfect vehicle to transport wiring back to the dwelling's wiring circuits.

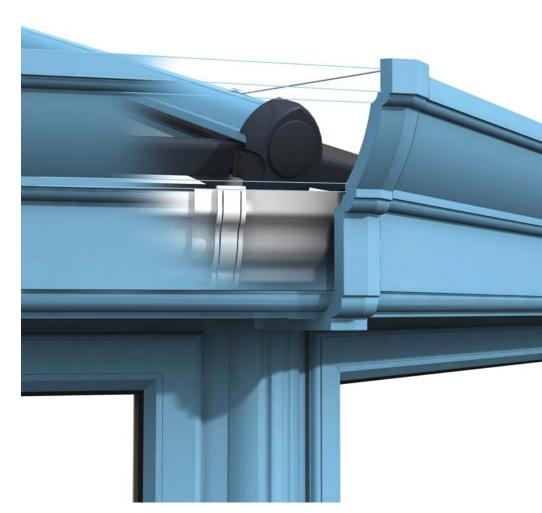


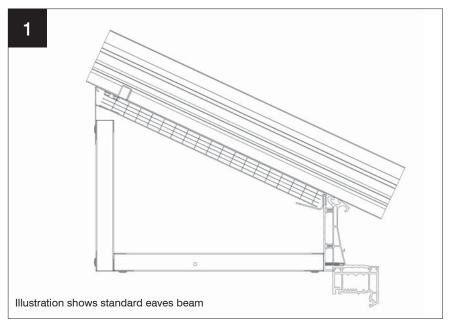
Optional Cornice externally

Cornice can be used to give additional visual interest.

It can be used with standard eaves beam or with the Super Duty eaves beam.

Corner covers for 135 and 90 degree corners are now featured as standard.



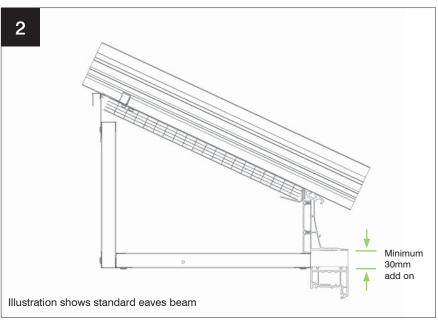


Ladder framework terminates on Fascia - standard eaves

Here we have the ladder steelwork terminating on the PFTB plank fascia (using standard eaves beam).

This detail is used when there are window frames around the complete perimeter and where there are no box gutters included in the design.

This design is also used if the ladder is retro fitted to an existing Ultraframe roof.

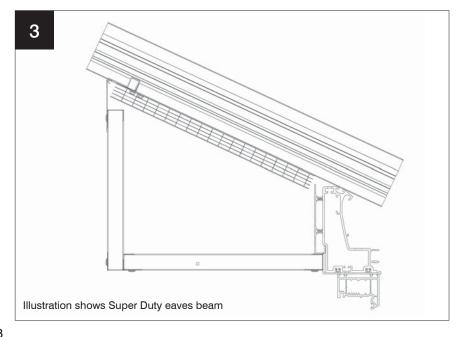


Ladder framework terminates below Fascia - standard eaves

This detail is used when there is a box gutter included in the design. The steelwork ladder terminates underneath the PFTB plank fascia.

Please note the following;

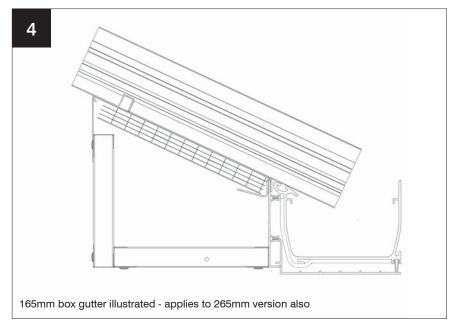
- window frames all round, a frame add-on of at least 30mm must be used.



Ladder framework terminates below fascia - Super Duty eaves

Here we see the roof sat onto window frames featuring the Super Duty eaves beam which is used over large door openings

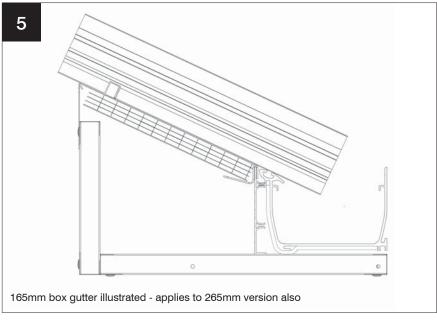
The ladder steelwork terminates under the PFTB plank fascia.



Box gutter - terminates on fascia

This detail is created when the ladder steelwork framework is retrospectively fitted to an already built conservatory.

Horizontal ladder framework terminates onto the box gutter cladding.

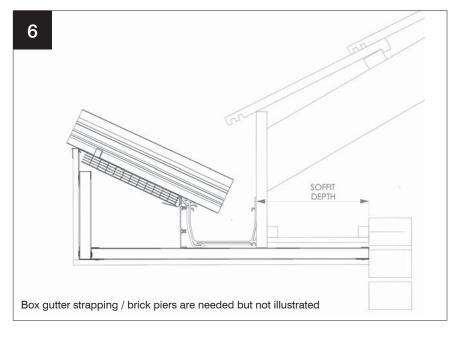


Box gutter - terminates below fascia

When starting a new installation that features a box gutter, this is the way the ladder framework is finished at the box gutter.

To ensure this detail is executed accurately, it is necessary to undertake the following;

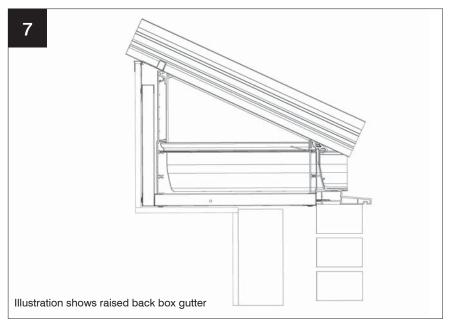
- window frames all round, a frame add-on of at least 30mm must be used.



Box gutter - terminates onto bungalow fascia

To achieve this detail a 30mm add on is required and this allows the horizontal ladder to sail through to the host wall.

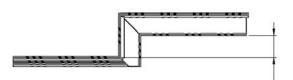
Please supply soffit depth when ordering



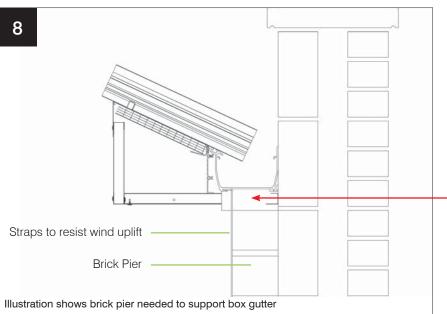
Box gutter - raised back

When the conservatory design features a raised back box gutter, this is the detail.

Please note the rule about 30mm add-on/cill applies



Plan View: Raised back box gutter

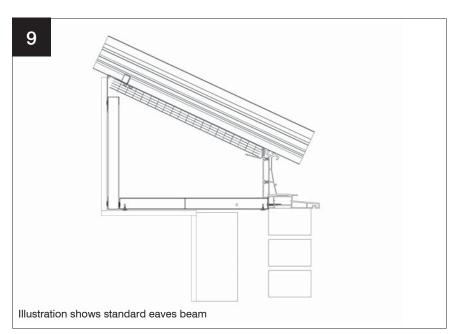


Box gutter - masonry parapet wall

In this situation, a brick pier internally is necessary to support the box gutter. Straps are necessary to resist wind uplift.



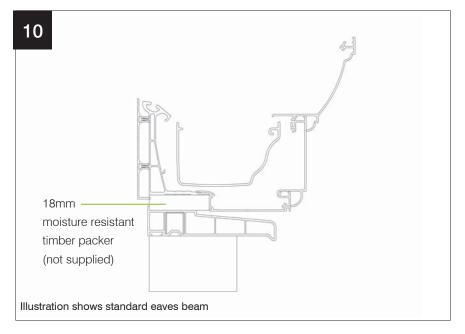
2x required on each pier



Standard eaves on cill

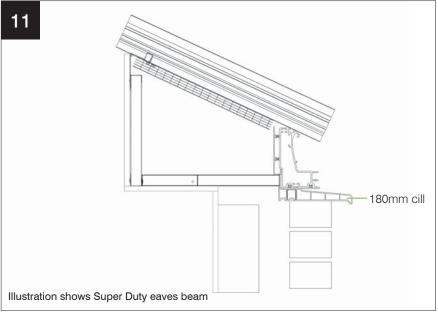
A minimum 30mm cill is needed to create this detail.

Horizontal ladder terminates below fascia. Internal block work MUST allow horizontal framework to fly through without interference



Standard eaves beam on cill with Cornice

When Cornice is used with a cill an 18mm timber packer is inserted

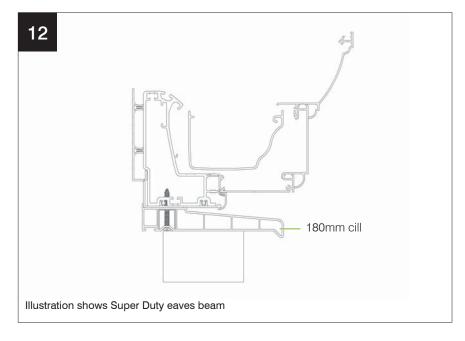


Super Duty eaves on cill

When building the roof onto masonry, recommended good practice detail is to use a cill.

As the Super Duty eaves beam sits 'inboard' a further 25mm, we suggest using a 180mm cill.

As drawn, the ladder steelwork terminates below the PFTB plank fascia.



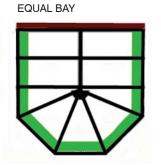
Super Duty eaves beam on a 180mm cill with Cornice

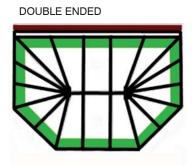
In this situation, we recommend a slightly deeper cill than on standard eaves beam.

EVERYDAY SHAPES

Section 1

Victorian Options

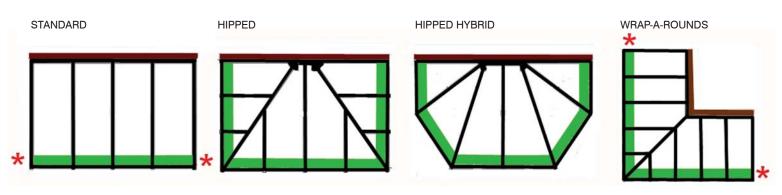




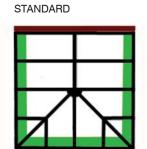


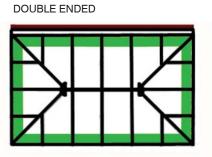


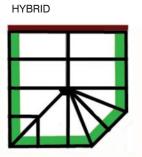
Lean-to Options

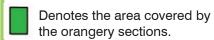


Georgian Options









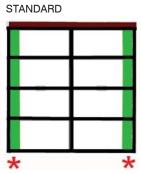
Please note that the Orangery section widths will vary dependant on roof pitch.

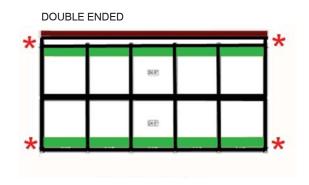
Cloaking requirements for gables.

This needs to be considered as part of the design and is the responsibility of the retailer to supply and install the materials required to clad off the 'open' end.

Shapes not identified above that feature a valley may incur an additional manufacturing charge.

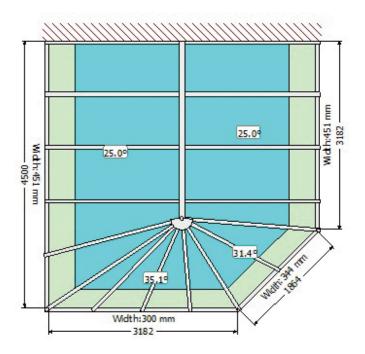
Gable Options

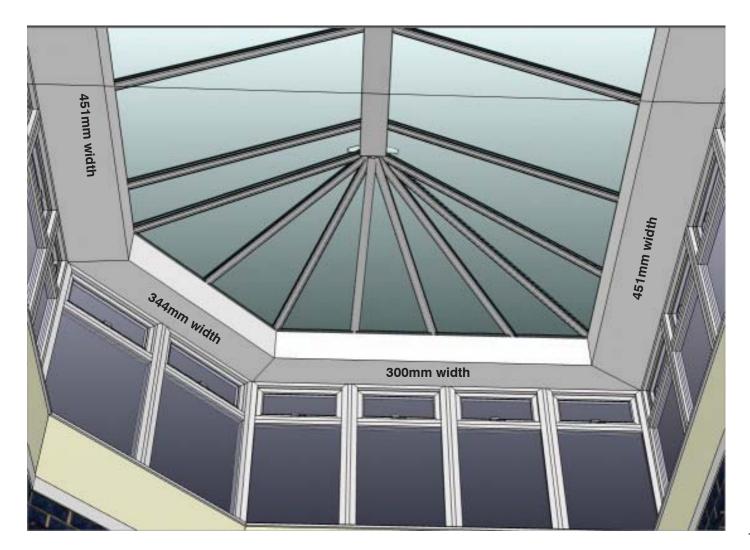




CASE STUDY

When selling a Liv<u>in</u> Room, it is important to understand that where the design features different pitches - as illustrated - the projection of the ladder framework is varied between elevations. (The height of Liv<u>in</u> Room is constant across elevations). Images lifted from U-Design software.





LIVIN	roon	n					OHDEN _			
ACCOUNT No.										
Company Name										
Company Name	•••••	••••••••••								
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Company Contact	•••••									
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Livin Boom UDCD	ADE		HODITON	TAL MURTH						
Liv <u>in</u> Room UPGRADE			HORIZONTAL WIDTH - BETWEEN 300 - 1200MM			FRAMEWORK DETAIL				
UPGRADE WITH ROOF ORDER			STANDARD WIDTH (300mm)			ON FASCIA* BELOW FASCIA				
UPGRADE WITH RETRO FIT			OTHER			IF FITTING TO A BUNGALOW PLEASE INDICATE				
Original roof job no. if applicable:			Please confirm:			SOFFIT DEPTH				
TOP CAPPINGS			BAR UNDERCLADDINGS			FULL HEIGHT WALLS				
DOME			STANDARD			PARTIAL WALLS				
BEVEL				ROUND SQUARE			FULL HEIGHT FRAMES			
EAVES BEAM			CORNICE			PLEASE STATE ON DRAWING/STYLE AND DIMENSIONS *N.B. IF ORDER IS RETRO FIT THEN OPTION OF ON FASCIA IS THE ONLY OPTION AVAILABLE)				
STANDARD (VAAAH) STRUCTURAL (SEB) GABLE BEAM (MUST be used with CORNICE)			YES							
GYBEE BEYIN (MOC	or so assa war soran	<i>02)</i>	11/12/00	GLAZING OP						
ANTI SUN (1.2)	ANTI SUN (1.5)	CLEA	IR.	UNGLAZED		CONSERVAGE	ASS- MS POLYMER SI	EALANT MUST BE	USED	
A1 (BLUE)	B1 (BLUE)	☐ C1	(1.2)	POLY 25MM	1 🗌	SUBTLE BLUE				
A2 (GREY)	B2 (GREY)	C2		PLY 35MM	24MM GLASS	NEUTRAL CLE				
POLYCARBONATE		35m	m		R COLOUR - GLASS UNITS		EALANT - MS POLY			
CLEAR	OPAL		CHARD/ODAL	SILVER (Defa		WHITE (NCGS	,	BES REQ:		
☐ BRONZE CRESTING	BRONZE/OPAL	☐ HEAT	GUARD/OPAL	BRONZE	FINIAL	BLACK (NCGS	001B) N.B. For u	ise with Conserva	glass	
RENAISSANCE	☐ TUDOR ☐ ELIZABETHAN		PIKESTAFF		SCEPTRE	BALL				
BAROQUE	CLASSIC LOW P				CORONET	CLASSIC	LOW PROF	FILE A	ALUMINIUM	
TIE BARS		CONSER	VAFLASH	ROOF VENT	ROOF VENT MEC	CHANISM				
ROOF COLOUR	☐ BRASS ☐ Soaker Only		BRASS	MANUAL WITH BF	RASS MANUAL WITH CHROME					
TBRK (If possible) CHROME Yes			CHROME _ ELECTRI		ELECTRIC WITH S	WITH SWITCH ELECTRIC WITH RAIN SENSOR/THERMOSTAT				
ANCILLARY EXTR	RAS			_						
PLEASE SIGN B	FLOW & FAX BA	CK TO	0843 208 (5944 (auotes)	or 0843 208 694	5 (orders)				
				(quotes)						

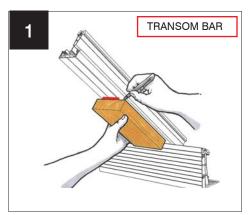
DATE _____

SIGNED _____

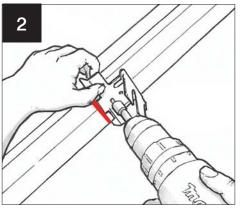
ultraframe Transforming light and space

INSTALLATION - QUICK OVERVIEW

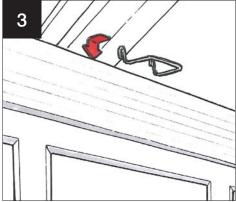
A step by step comprehensive guide is available - ask for a copy.



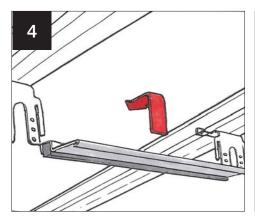
Using the location plan provided find the dimension for setting out bracket positions on the transom bars. Measure up the bar from top edge of fascia board, and mark it. It may be simpler to cut a piece of timber to length and use as a template.



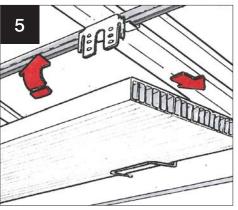
Take a transom bracket and attach using two 4.2 x 19mm self drill Phillips pan head screws supplied- the back edge of the bracket should butt up to the pencil line



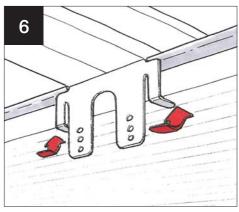
Over the 'V' groove fascia board at the eaves, at each transom bar position, hook over the cloaking panel support clips.



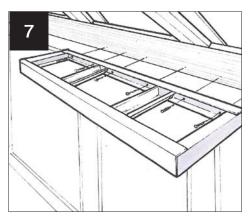
Offer into position the cloaking panel (polycarbonate) support trim – this is lifted up and over the two tabs one per side of the transom brackets



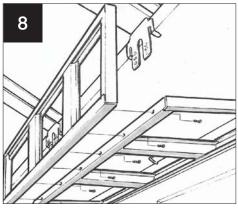
Take the piece of polycarbonate cloaking panel which lays parallel to the eaves and 'sit' it into each of the support clips that are hooked over the fascia. Then push the polycarbonate up into the roof.



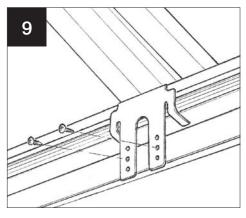
Next bend back the long legged tabs to hold the polycarbonate cloaking trim in its final position.



Offer up the horizontal ladder- a temporary timber support leg will help you here. Use two fixings $4.8 \times 32 \text{mm}$ at 250mm centres into pre punched holes to attach the ladder.



Choose the matching vertical ladder and offer it into position – hold firmly whilst attaching to the matching horizontal ladder using M4 x 13mm fixings, at 250mm into pre punched holes. Ensure the vertical ladder is behind the brackets.



For each transom bracket use two M4 x 13mm fixings – the layout of the ladders should help you chose which of the three fixing positions to choose from.





