

## important: please read...

- Ensure you have all the relevant packages before opening them.
- Read the installation guide in this booklet prior to fitting your roof.
- Considerations should be given when constructing and installing the conservatory to:
"The Health and Safety at Work Act 1974"
"The Working at Height Regulations 2005"
"The Construction (Design and Management) Regulations 1994"
Together with all other relevant legislation to ensure safety precautions are in place.
- Ensure the Window frames installed are done to the manufacturers recommendations and that they are square and plumb to the adjoining building.
- Ensure silicone used is "low modulus neutral cure".

NOTE: The global 600 product has been designed to suit a 70 mm Window section.

## contents...

survey information 3

assembly diagram ..... 4
assembly guide 5
assembly guide 6
assembly guide 7
assembly guide 8

## component colour key

(used throughout the guide):
assembly guide 9
component diagrams ..... 10
component diagrams ..... 11
stockists order form back cover

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## survey information

## WIDTH

All widths shown are internal frame sizes.
Measure distance between the internal faces of the window frames, then order roof equal to, or greater than the required size. If you order a roof larger than you require it will be necessary to modify the panel widths.

If internal frame width is greater than 6000 mm you will need to order two roofs to be joined together:
E.g. To order a 8000 mm wide roof, first add 600 mm to the internal size required. $8000+600=8600 \mathrm{~mm}$, then order a combination of roofs equal to or greater than the size required. Order two roofs 1 @ 4200mm wide and 1 @ 4800mm.


If the roof is to fit to a wall, the effective width of the roof is increased by 30 mm .
E.g. a 1200 mm wide roof fitted against a wall on one side will have an effective internal width of 1230 mm .

## PROJECTION

All projections are internal frame sizes.
Measure the distance between internal face of the window and house wall, then order the roof equal to, or greater than the required size. If you order a roof larger than you require it will be necessary to modify the panel and profile lengths.

The proposed wallplate height can be calculated using the detail below:


## 1. ESTABLISH LENGTH OF FIRRING BOX

## assembly guide



Ensure the conservatory footprint is square with the front parallel to the house wall.
Measure the internal frame projection of the conservatory.


The firring box is supplied in one standard length

## 3. FIT FIRRING BOX



Run a silicone line along the head of the window and position the firring box. Secure the firring box using suitable fixings at 600 mm maximum centres and 150 mm max. in from each end. Repeat for opposite firring box.


## 4. ESTABLISH LENGTH OF EAVES BEAM

## 2. CUT DOWN AND NOTCH FIRRING BOX

Transfer the internal frame size onto the firring box and cut the box to length. It is vital that you measure from the smaller end of the box!
outside face


LH


RH

With the box cut to length, the notch details dimensioned below require cutting out of the taller end of the box. Notching is a 2 step approach as shown below.


1. Notch the other external skin of the firring box to the sizes above

2. Notch the other 3 skins of the firring box to the sizes above

Note: the wall end rafter assembly (shown circled above) does not form part of the standard roof kit. This assembly requires ordering separately.
A. WINDOW FRAMES TO BOTH RETURNS

B. WALL TO ONE RETURN

NE $\Rightarrow$

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $30 \mid$ | equal | 600 | 600 | equal |

C. WALL TO BOTH RETURNS



The eaves beam is supplied to suit a standard range of conservatory sizes and is prepared ready for 600mm rafter centres.
Should your conservatory be of a non-standard width, then the eaves beam will require cutting down to suit. The easiest method is to maintain a symmetrical roof by reducing the first and last rafter centres.

The 3 views shown left ( $A, B$ and $C$ ) depict the different situations that can occur.
A. Measure the length of the eaves beam provided then measure the external frame width. Deduct one from the other and cut half of this remaining dimension off each end of the eaves beam. Drill a new 9 mm hole 70 mm in from each end within the bolt slot on the eaves beam.
B. Firstly deduct 40 mm from the side of the eaves beam that will go against the wall. Measure the length of remaining eaves beam then measure the external frame width. Deduct one from the other and cut half of this remaining dimension off each end of the eaves beam. Drill a new 9 mm hole 70 mm in from the frame end and 30 mm in from the wall end
C. Measure the length of the eaves beam provided then measure the distance between the walls. Deduct one from the other and cut half of this remaining dimension off each end of the eaves beam. Drill a new 9 mm hole 30 mm in from each end within the bolt slot on the eaves beam.

## assembly guide

## 5. CUT DOWN AND PREPARE EAVES BEAM


cutting down if your roof is of a non-standard width.


* refer to the previous instruction on how much the eaves beam length should be reduced.


With the length of the eaves beam reduced, new end rafter fixing holes need to be drilled.

## 7. CUT DOWN AND PREPARE WALLPLATE



The wallplate assembly should be cut down when the conservatory width is non-standard.

* the deductions and drill hole positions should mimic the previously altered eaves beam.


When the wallplate fits into a notched out firring box, the shaded area shown requires cutting away to a depth of 10 mm .

## 6. FIT EAVES BEAM



Prior to fitting the eaves beam, run a sealant line along the head of the window. Secure the eaves beam using suitable fixings at 600 mm maximum centres, 150 mm in from each end.

Please note the position of the eaves beam to the head of the window on the illustration above.

The eaves beam will always run over the window corner posts to external frame.

## 8. FIT WALLPLATE



Offer the wallplate assembly to the wall so each end is resting into the notched out firrings. The wallplate should be level.

Remove the rain excluder from the wallplate and secure the aluminium back to the wall with suitable fixings (600mm max. centres, 150 mm max. from each end). Use the extrusion line on the aluminium as a guide for the fixing hole positions.

Refit the rain excluder.

## assembly guide

## 9. CUT DOWN AND PREPARE RAFTERS

Establish the new rafter length, (they should all be the same if the conservatory is parallel).
Cut down the rafter and top and bottom caps to size.


Slide the aluminium rafter out of the way and drill a new hole in the bottom cap, 100 mm up from the bottom, 23 mm down from the top.
Should the projection of your conservatory be of a nonstandard size, then the rafters will require cutting down in length.

To establish the new rafter length, measure the distance from the centre of the hole in the wallplate to the centre of the corresponding hole in the eaves beam, (see illustration above) and add $\mathbf{1 2 3 m m}$. Alternatively, take the internal frame projection and add 81 mm to get the rafter length.


## 10. FIT RAFTERS




Complete the assembly of the roof skeleton

Locate each rafter into the wallplate and eaves beam holes so they span the conservatory projection.

Fasten each end with the washer headed nut provided, use a 13 mm spanner.

Ensure that the aluminium rafter is flush with the rafter bottom cap before tightening.

Each rafter should be parallel with the next, square to the wallplate and eaves beam and also be at a 2.5 degree pitch.

## assembly guide

## 11. FIT GUTTER



Fit the gutter brackets to the eaves beam at 600 mm maximum centres, starting 200 mm in from the ends. Ensure they are firmly clipped into position.

Push the gutter into the clip on the back of each bracket then pull up on the front of each bracket to locate it under the lip on the inside
front of the gutter.


Measure the distance between the gutter stop ends on the underside of the gutter. Cut the undergutter trim (XGIT2) to size and clip into the eaves beam.

Complete the eaves beam and gutter assembly by fitting the gutter stop ends, under-gutter trim and downpipe.

If the eaves beam has been cut down in length then the polycarbonate support trim will need re-cutting and fitting into the eaves beam between the rafters. Ensure that the polycarbonate support adaptors are fitted into each end of the support trim.

If you have cut down the length of the eaves beam, you will need to cut down the plastic gutter. (Gutter length = eaves beam length -180 mm ).

## 12. PREPARE ROOF SHEETS

If the length of the rafters have been reduced to suit the size of your conservatory, the polycarbonate roof panels will need to be cut down in length by the same amount. Measure down from the end of the panel with the silver tape on.
The length of the roof sheet should be rafter length +4 mm .

Lengths of special breather tape are supplied to close off the gutter ends of the roof panels. Ensure the protective film on the panel is pulled back prior to attaching the tapes.


It is vital that the roof sheet end closer is sealed continually on both faces of the roof sheet.

Any panels that are cut down in size will require the swarf to be vacuumed out of the chambers.


Seal closed the open cavity at each end of the sheet closer

## assembly guide

## 13. FIT ROOF SHEETS

The rafter top caps should be the same length as the rafter. Lubricate the gaskets on the caps with silicone spray or soapy water, then knock on the caps starting at the wallplate end using a white faced rubber mallet.

Commence installation of the roof sheets working from one end of the conservatory to the other.

Once in position, the roof sheet end closer should be flush with the end of the rafter and the panel be central between the glazing bars.

When you are happy with the position of the roof panel, lift up the panel off the support trim, remove the film from the tape and press the panel down into position.

If you have altered the rafter centres to suit the size of your conservatory, you will need to cut down the width of a panel(s). The new width required will be rafter centres less 22 mm ( 11 mm each side).
14. CLOAK END RAFTER

15. FIT REMAINING CLADDINGS AND CAPPINGS


The rafter, its top and bottom cap and the roof sheet closer should be flush at the bottom. Secure the end cap with the screw provided (XM420), push on the cover cap.

Locate the wallplate end cap, ensure that the shoulder of the cap is sealed onto the wallplate top cap (see above).
Secure the end cap with the machine screw provided (XM525), push on the cover cap.

Knock on the internal eaves beam cover and wallplate bottom cap using a small nylon headed hammer.

If you have altered the width of the roof, these will require cutting to size to suit the new internal frame width.

## component diagrams



XLPW1
Wallplate
O XEBC5 00 Wallplate Top Cap used on all packs

G6WPE contents


OO XERC2 00
End Rafter Bar Side Cap used on all packs


XJC25 O/ALOOO Rafter Top Cap used on all packs



XJC25 O/ALOO
Rafter Top Cap used on all packs

5


O XRE35 0
Rain Excluder used on all packs

1


OXLPWEC1L/R○○ Wallplate End Cap (Handed) used on all packs

Rain Exclude Gasket
used on all packs
ntents



XM420 End Cap to


XJC25O/ALOOO
Rafter Top Cap
used on all packs

G6GB2
XGHC1 O/XGHG10
Plastic Clip Insert/
Top Cap Gasket

XGHC1 $\quad / X G H G 10$

G6GB1 contents


XT1
Transom Rafter used on $2 \mathrm{~m}, 2.5 \mathrm{~m}$



Transom Rafter used on 3.5 m packs

## $$
\& 3 m \text { packs }
$$ <br> <br> \& $3 m$ packs <br> <br> \& $3 m$ packs <br> G6GB1 contents

21

XT1
Transom Rafter used on $2 \mathrm{~m}, 2.5 \mathrm{~m}$
XLPT3
Transom Rafter
Rafter Bottom Cap
used on all packs

Transom Rafter
used on 4 m packs

ransom Rafter

Transom Rafter
used on $2 \mathrm{~m}, 2.5 \mathrm{~m}$


Rafter Bottom Cap used on all packs

O XBC1
Rafter Bottom Cap used on all packs

Transom Rafter used on 4 m packs

Transom Rafter used on 3.5 m packs

G6GB2 contents


XERC25 OIALOO
End Rafter Bar for Wall Top Cap


OXWEC10O End Rafter Bar
for Wall End Cap
sed on all packs

G6NSE contents

## component diagrams



OXPS100
Polycarbonate Support Trim used on all packs

OO XEBC8 OO
Eaves Beam Internal Cover used on all packs


XLPB1 Low Pitch Foam Bung used on all packs

G6WPE contents


XLPT3
Transom Rafter used on 4m packs

O- XBC1 00
Rafter Bottom Cap
used on all packs


XLPEB1
Eaves Beam used on all packs
used on all packs


O XEBC6L/R 0 Eaves Beam End Cap (Handed)


G6END


O XJEC1
Rafter End Cap used on all packs


OXPS2 0 Polycarbonate Trim Support Adaptor used on all packs

XM825
Bar to Wallplate Fixing Nut \& Bolt


O XJEC1
Rafter End Cap used on all packs


OXPS2 0 Polycarbonate Trim Support Adaptor used on all packs

G6GB2


OXR21 0
Downpipe Shoe used on
all packs
pack quantities/lengths:
 used on all packs
End Rafter Bar for
Frames End Cap (Handed) used on all packs

G6END

OXJEC1-O

Rafter End Cap used on all packs


OXPS2 0
Polycarbonate Trim Support Adaptor used on all packs
contents

1 per 600mm

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O XLPSPEC35
Polycarbonate
End Closure
used on all packs

XM525
End Cap to Wallplate Screw used on all packs

## G6WPE contents



XM825
Bar to Wallplate Fixing Nut \& Bolt used on all packs

XM420
End Cap to Rafter Screw used on all packs

## G6END

## contents

1

+ +1

XM420
End Cap to Rafter Screw used on all packs


XPOLY35
Polycarbonate used on all packs

## 1



XPOLYTAPE Breather and Closure

Tapes for
Polycarbonate used on all packs
G6PC1 contents


XM420
End Cap to
Rafter Screw used on all packs

XPOLY35
Polycarbonate used on all packs

contents

contents


OXRSY2 0 External Stop End used on all packs

## GUTTER


1


Bar to Wallplate Fixing Nut \& Bolt used on all packs

G6GB1

GUTTER

These are shown in triangles such as these:
G6PC2 contents
 Gutter Trim used on all packs

# stockists order form 

(please photocopy and use to fax)


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[^0]:    This Synseal Guide has been produced as an aid. All information in this manual is provided for guidance only. Synseal Extrusions Ltd cannot be held responsible for the way in which the information in this manual is interpreted. We reserve the right to alter specifications and descriptions without prior notice as part of our policy of continual development. All dimensions are in millimetres. Do not scale drawings.

