# Assembly Guide

**Global Summer**

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1. Before you start

This installation guide enables the Global Summer decorative fascia cladding and internal pelmet system to be added to a standard Synseal Global conservatory roof. This guide should be used in conjunction with our standard conservatory roof assembly guide.

Roof Layout Plan
The roof layout plan is essential as it depicts the size of the roof and the position of the main roof components. Thoroughly check that the roof fits the window frame layout and that all the roof components are present.

Each length of material should be numbered to correspond with its position on the roof plan. An example of this is an eaves beam assembly numbered BM17 on the roof plan, the aluminium, gutter and cladding lengths should all be numbered BM17 to aid identification.

Care of Products On Site
Although the Synseal roof is robust in construction, simple measures should be taken when handling, storing and erecting the conservatory roof.

When unwrapping the packages take care not to damage components with a knife.

Do not leave PVC-U components outside in freezing conditions then immediately attempt to knock them on.

Do not leave brown components in their packaging whilst in direct sunlight at times of high temperatures.

Sealing
The Synseal roof requires sealing at important junctions in the roof, the use of low modulus, neutral cure sealants is vital. Self cleaning glass may have compatibility issues with certain types of silicone based sealants, refer to your glass supplier regarding the use of specific sealants.

Tools Required
The following tools are necessary to install the Synseal roof:

- 13mm socket and ratchet
- 13mm open ended spanner
- 17mm open ended spanners
- Power drill + HSS and masonry bits
- White rubber headed mallet
- Utility knife
- Tape measure
- 45mm diameter hole cutter
- 60mm diameter hole cutter
- 75mm diameter hole cutter
- Sealant gun
- Spirit level
- Hack saw
- Roofing square
- Cordless driver + pozi bits
- Nylon roller

PLEASE NOTE: Lengths over 3.9m will require 2 people to lift.
2. Fitting options

The Global Summer system has two main fitting options - raised line and low line, which alters the height that the decorative gutter fascia sits above the conservatory windows. Please refer to the appropriate sections of this guide to install the version of Global Summer you are using.

**Raised line** installation uses the orangery eaves beam extender beneath our standard eaves beam to lift the roof 170mm over the frames and provides increased space between the pelmet pod internal soffit and the roof. This increased height adds grandeur to Global Summer installations, provides a more authentic orangery look and helps distinguish them from standard conservatories.

**Low line** installations use our bi-fold door support underneath the heavy duty eaves beam to keep the pelmet pod internal soffit in line with the conservatory's gutter. Low line is ideal when the overall conservatory height needs to be contained, or to fit in with a more compact property's proportions.
2.1. Solution 1 - **Raised line**

Using the orangery eaves beam extender XOEB1 for eaves beam at a higher level.

1. **XEB7** Eaves Beam

2. **XOEB1** Orangery Eaves Beam Extender

3. **Please Note:** XM825 bolts should already be inserted in the orangery eaves beam extender. Make sure the correct number are present before fixing. In the event that beams come as separate components (e.g., oversized lengths that require staggered joints) these will require bolting together at approx 500mm centres and 50mm from either end.

4. **Please Note:** Ensure cleat rests up against edge or it may prevent placement of the eaves beam clad XEBC7.

Join eaves beam extenders together at corners using the supplied eaves beam corner cleats XSC1-90 and supplied 12mm fixing screws XM48-12.

2.2. Solution 2 - **Low line**

Using the bi-fold support XBFDS1 for eaves beam at a lower level.

1. **XEB7** Eaves Beam

2. **XBFDS1** Bi-fold Support

3. **Please Note:** XM825 bolts should already be inserted in bi-fold support. Make sure the correct number are present before fixing. In the event that beams come as separate components (e.g., oversized lengths that require staggered joints) these will require bolting together at approx 500mm centres and 50mm from either end.

4. Apply low modulus silicone sealant between bi-fold support and head of frame.

5. Secure bi-fold support to head of frame and pilot with a 4mm drill bit. Fixings to be at approx 500mm centres and at correct length to suit frame used.
3. Aluminium cast gutter brackets

Fitting the XGUTF-GC5 aluminium cast gutter brackets.

1. Join heavy duty eaves beam together at corners using the supplied eaves beam corner cleats XSC1-90 and supplied 20mm fixing screws XM48-12.

   Brackets nearest mitred joints are to be set back 200mm from outer corner of eaves beam.

2. Locate gutter into gutter brackets and clip to fix in position.

   IMPORTANT: Fit and glaze roof prior to fitting aluminium cast gutter brackets as per main conservatory assembly guide.

   Secure XGUTF-GC5 aluminium cast gutter bracket to eaves beam using 2x XM420P self drilling screws per bracket. Fix first bracket 200mm from wall then approx 600mm between brackets.

3. Fit all gutter corners to complete the gutter circuit of the roof.

   Locate gutter into gutter brackets and clip to fix in position.
4. Preparation for downpipe

Using a 60mm diameter hole saw cut a hole through the stop end **XYR SY2**, using the drill indent in the stop end as the central location point. Fit to guttering without spigot.

Next, using a 75mm diameter hole saw cut a second hole through bottom section of aluminium gutter fascia **XGUTF-AL3** using the central die line, and set 65mm forward from the wall end of the gutter fascia.

Trim X180E 12mm from centre line as shown, to allow for downpipe when fixed to **XGUTF-AL3**.

5. Aluminium gutter fascia bottom assembly

Fixing the aluminium gutter fascia sections **XGUTF-AL2** (middle) and **XGUTF-AL3** (bottom) together.

**XGUTF-AL2** (middle) and **XGUTF-AL1** (top) gutter fascia sections require pilot/porting 100mm from either end and at 500mm centres.

**PLEASE NOTE:** Ensure swarf is removed prior to fixing to prevent obstruction.

As a precaution against the unlikely event that the internal gutter system overflows in extreme weather conditions - it is recommended that 6mm diameter darinage holes are placed in strategic positions to allow any excess water to escape. These should be located within the capilliary channel to suit each individual installation.
6. Gutter spigot attachment

Fitting the gutter spigot XYR-400 and stop end XYR SY2 through the aluminium gutter fascia XGUTF-AL3.

Pass gutter spigot XYR-400 through bottom gutter fascia section XGUTF-AL3 and fix to stop end XYR SY2. Twist until tightly fitted.

PLEASE NOTE: XGUTF-AL3 will not sit level until attached to gutter brackets via XGUTF-AL2 and XGUTF-AL1.
7. Box gutter - optional

Fitting the Global Summer system to a box gutter.

1. Prep 90° external bend XYR-935 by cutting a hole on the intersection of the two centre lines as shown using a 60mm holesaw.

Cut out a section 26mm wide by 15mm high for the top fascia section XGUTF-AL1 to fit into. This is done 16mm from the outer edge as shown.

Once 90° external bend is in place, fix gutter spigot XYR-400 before the top fascia section XGUTF-AL1 is attached as shown on page 7.

2. Using standard lead flashing procedures, ensure flashing is extended to seal off corner as shown above by the dotted line.
8. Aluminium gutter fascia top assembly

Fitting the XGUTF-AL1 aluminium gutter fascia top section.

**PLEASE NOTE:** The fascia top section's length (XGUTF-AL1) will have been reduced by a minimum of 6mm to accommodate XGUTF-PLT and XM4819SSP screw heads.

Secure XGUTF-PLT to XGUTF-AL1 gutter fascia using 2x XM4819SSP self drilling screws.

Pilot XGUTF-AL1 as per section 5. Secure XGUTF-AL1 to XGUTF-AL2 using 1x XM4819SSP at 500mm centres - this operation requires 2 people.

Push XGUTF-AL1 towards aluminium cast brackets XGUTF-GC5 and secure using 2x XM4819SSP self drilling screws per bracket. Locate screws into receiving slots and secure.

**PLEASE NOTE:** Assembly shown unglazed for illustrative purposes only.

9. Aluminium gutter fascia joint

When fixing longer gutter fascia spans at 180° joins, secure using X180E aluminium inline castings. 2x XM4819SSP self drilling screws per bracket section. Secure top section of bracket first followed by lower section.

Secure aluminium gutter fascia joint using X180E aluminium castings. Use 2x XM4819SSP self drilling screws per bracket section.
10. Sealing the aluminium gutter fascia top section

1. Fix X180E to end of fascia using 2x XM4819SSP screws.

2. Seal with low modulus silicone sealant in areas shown.

3. Seal XGUTF-AL1 at mitred joints using low modulus silicone sealant.

11.1. Pelmet pod solution 1 - Raised line

Pelmet pods XPP1-030 should be fixed in this manner when using the orangery eaves beam extender XOEB1.

1. Locate soffit bracket of pelmet pod XPP1-030 into receiving lug. Ensure bracket is fully located before fixing.

2. Secure in required position using 2x XM420P fixing screws 400mm centres recommended.

3. Screw fixings are located at either side of soffit bracket to secure the pelmet pod XPP1-030 to eaves beam.

PLEASE NOTE: Pelmet pods XPP1-030 may require window packers to ensure that they sit level and plumb for the plasterboard.
11.2. Pelmet pod solution 2 - Low line

Pelmet pods XPP1-030 should be fixed in this manner when using the bi-fold support XBFDS1.

1. Locate soffit bracket of pelmet pod XPP1-030 into receiving lug. Ensure bracket is fully located before fixing.

2. Secure in required position using 2x XM420P fixing screws - 400mm centres recommended.

3. Screw fixings are located at either side of soffit bracket to secure the pelmet pod to eaves beam.

**PLEASE NOTE:** Pelmet pods XPP1-030 may require window packers to ensure that they sit level and plumb for the plasterboard.

12. External eaves beam cladding

Only required when using the orangery eaves beam extender XOEB1.

1. Place external eaves beam clad XEBC7 on to eaves beam extender.

2. **Recommendation:** Seal between XGUTF-AL3 and XEBC7 using low modulus silicone sealant.

Cover corners using 90° external corner mouldings XSEBC 90E or 135° mouldings on Victorian orangeries XSEBC 135E, these will require trimming to fit beneath the X90E/X135E external fascia corners.
13. Pelmet pod placement

The 400mm centres shown below can be adjusted to suit light fixtures/plasterboard etc, as long as enough support is provided for the finished pelmet construction.

1. Pelmet pod placement - corner detail.

2. Pelmet pod placement - wall end options

Option 1 - standard
Standard pelmet pod XPP1-030 used, butting up to house wall.

Option 2 - flush to wall
Pelmet pod prepped from standard XPP1-030 by trimming 30mm aluminium on side wall.

TIP: 400mm centres can also be measured as distance between leading edges.
14. Completion of the internal pelmet

Once the pelmet pods **XPP1-030** have been correctly positioned, two sections of plasterboard (not supplied) can be attached to the front and underside of the pelmet pods to complete the internal pelmet. The size of the pelmet pods will require a width of plasterboard 150mm for the front and 300mm for the underside. These must be cut to length to suit each elevation, giving consideration to joint positions so that they align with the pelmet pods.

Mullion pods **XMP1-015** can be supplied as an optional extra if required, in order to form a vertical mullion section between windows. The size of these pods will create a mullion 150mm wide and will project 150mm out from internal frame, which is designed to finish flush with the inside edge of a minimum 50mm cavity dwarf wall. Once the pods have been equally positioned along the height of the mullion, 3 sections of plasterboard 150mm wide can be attached to the pods to complete the mullions.

Once plastered and painted the top of the internal pelmet can be finished off with a length of flatboard **XFB300-500** which can be supplied as an optional extra if required. The flatboard should be cut to length to suit elevation and mitred to meet in the corners.
15. Global Summer components
16. Global Summer cross sections