global conservatory roof

The UK's market-leading aluminium and PVC-U conservatory roof system, designed without compromise and tested to the highest standards

Conservatory roofs

synseal®

A proven roof design – independently tested

Snow load capability > 2.7m

The Global roof has been exhaustively tested and the system has received British Board of Agrément (BBA) accreditation. A standard Georgian conservatory was independently assessed by façade-testing specialists Wintech Engineering to prove that Global can withstand the most extreme weather conditions, with market-leading performance results that far exceeded expectations.

BBA – test achievements

- Water penetration test at 300 Pascals: PASSED (equivalent to a Force 9 severe gale)

  24 hour water penetration testing was carried out, during which the roof was deluged with 113 inches of water, more than twice the average annual British rainfall.

- Uplift test at 900 Pascals: PASSED (equivalent to wind speeds at 85 miles per hour)
- Load test of 120kg per m^2: PASSED (equivalent weight of 4 feet of snow per m^2)

Wind speed resistance > 250 kph

Wintech Engineering – test achievements

Wind resistance testing using a modified DC6 aircraft engine and applying negative pressures to simulate increasing wind speeds.

- Wind speed of 90 miles per hour: PASSED (exceeding the UK's great storm of 1987)
- Wind speed of 130 miles per hour: PASSED (new record for a UK-manufactured conservatory)
- Wind speed of 160 miles per hour: PASSED (equivalent to a devastating Force 17 hurricane)

Structural integrity testing was then carried out on the same conservatory, after wind testing, with Wintech applying negative pressures to simulate increasing snow loadings.

- Structural integrity testing: PASSED (equivalent to 9 feet of snow per m^2)

The UK's No 1 best-selling conservatory roof system

The Global roof system is ideal for projects of all sizes, from standard design conservatories to large bespoke structures

Global roof took the UK's No 1 position in 2005 and has been there ever since, accounting for at least 1 in 4 of every conservatory roof installed today. This well-engineered roof has been designed to be easy to specify, easy to fabricate, easy to fit and easy to maintain. That's what makes the Global roof the ideal choice for conservatory projects worldwide.

Designed without compromise

Using state-of-the-art design software, Global conservatory roofing solutions can be individually scoped to provide flexible and creative living spaces. All classical styles of conservatory can be designed using the proven Global roof along with more contemporary styled designs. Global Summer is an innovative fascia cladding and internal soffit system which enables an authentic orangery look to be achieved, at an attractive price point.

BBA BRITISH BOARD OF AGRÉMENT
ASSESSMENT REPORT No: 1810

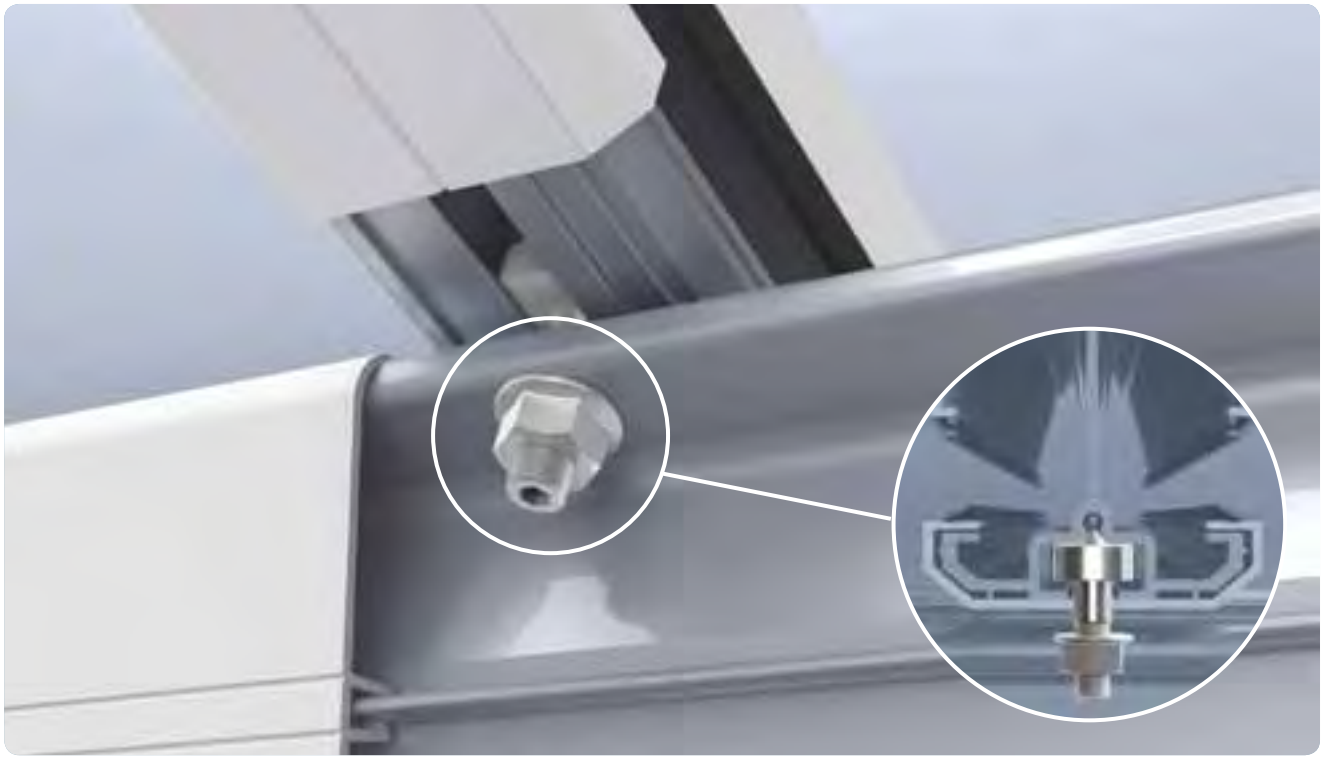
Fully tested and accredited

Large Edwardian style

Low maintenance glazing options

Woodgrain on White T-shape

Global roof design features



Single bolt system

Unique single fixing bolts are fastened internally for easy and quick installation. This system is totally watertight, as there is no need to drill and penetrate the main aluminium rafter meaning there are no holes for water to ingress through. The single fixing bolt is also fitted from below, making it easier to align and faster to fit than top-fitted conservatory roof systems.

Aluminium top caps

Global roof top cappings are available in aluminium and supplied in woodgrain foiled or painted finishes to specification, so they will not warp or distort under extreme heat or split under extreme cold.

Aluminium roof option

Global Plus is an optional specification which delivers a premium quality aluminium roof design. All external roofing components are manufactured from sturdy aluminium, with the exception of guttering and downpipes which use the standard Global PVC-U system for UK project applications.

global plus

High strength rafters

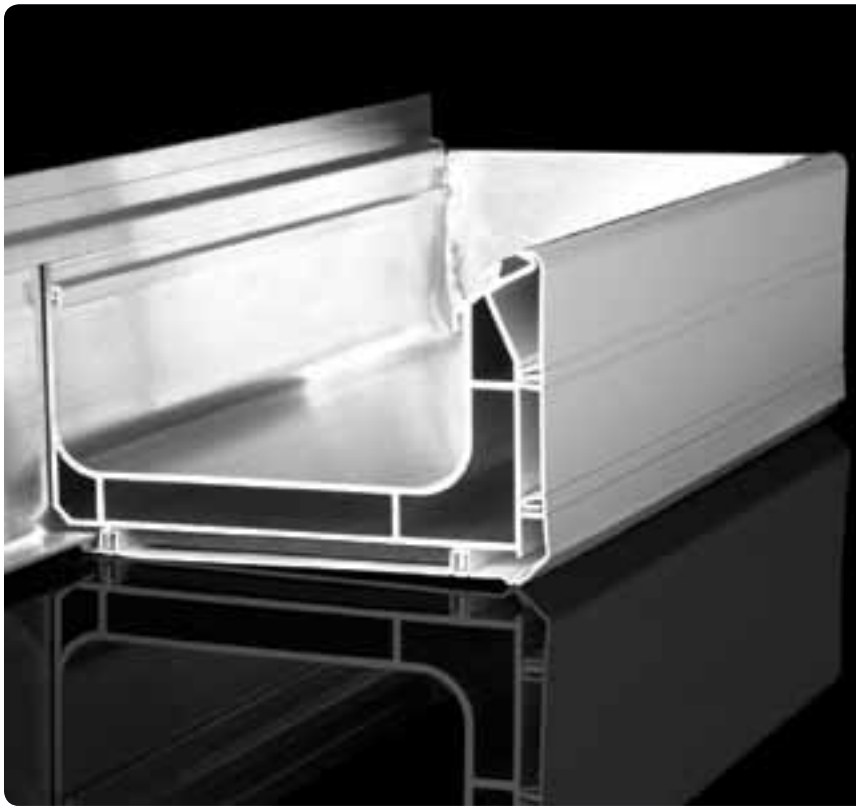
Rafter bars are designed for increased loads so there's no need to compromise on specifications for structural design or weather performance.

Elegant tie bar

Cross-bracing internal tie bars may be required to ensure roof stability, according to specification. Global roof tie bars are elegantly designed and do not significantly intrude into the head room of the conservatory.

End caps

End caps have a shoulder around the visible face for a more attractive appearance and have been designed with built-in drainage to relieve any trapped water.



Insulated box gutter

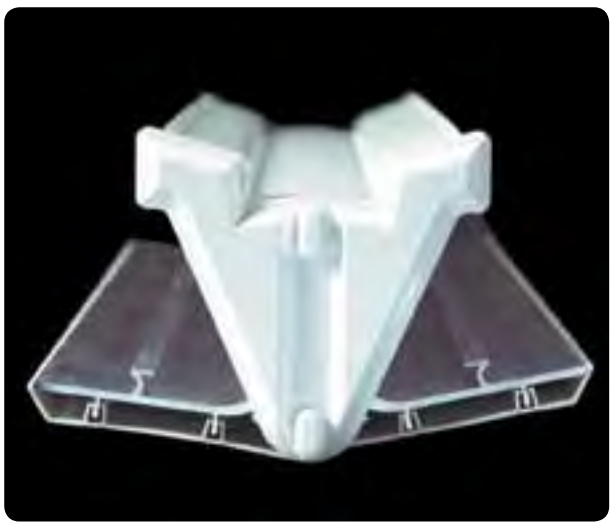
Global's innovative box gutter is twin skinned and insulated to reduce condensation. A special fixing plate ensures that, unlike other roofs, no holes are drilled in the gutter – so no leaks can occur and its large 205mm wide design accommodates extreme rainwater conditions. The double skin construction also increases strength and reduces sound pollution through the gutter. With no internal support brackets required, there are no potential traps for leaves or debris. Dedicated side and under claddings ensure a perfect match to the roof. Double box gutters are also available for higher capacity specifications and provide a solution for 'back-to-back' adjacent roof installations.

Tie bolt

When tightened, the precision engineered security locking bolt locates firmly into a dedicated channel and eradicates movement between the bolt and rafter, for a strong and rigid anti-slip joint connection.

Low level gasket system

Global roof features concealed low level gaskets, as no end user would wish to look up at their conservatory roof and see thick black gaskets around every glazed panel.



Variable valley

The flexible valley is designed to suit varying pitches and angles, and is cloaked internally and externally to give an attractive aesthetically pleasing appearance. Angled roof pitches varying from 5˚ to 35˚ can be accommodated.

Perfect lead flashing

The starter bar is designed to leave a perfect lead flashing line seamlessly connecting the house and the conservatory. The lead dresses into a built-in soaker forming a watertight seal and no lead needs to be dressed over the top cap, therefore preventing any unsightly lead lines or staining.

Range of ridges

Global roof offers 3 alternative ridge details, to ensure the right ridge can be specified for each project. These practical ridge designs are easy to fabricate and install, with no risk of subsequent draughts or water ingress.

Chamfered or contoured eaves beam cladding

Eaves beam internal claddings are designed to be easily removed for access and available in either chamfered or contoured ovolo profile, to suit the style of the conservatory's windows and doors.

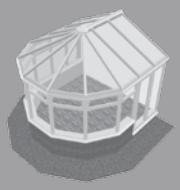
A style for every conservatory project

Individual design requirements will differ, so Synseal offers a range of conservatory roof styles to suit each installation. From simple lean-to designs perfect for installations with restricted height, to large bespoke designs with lantern tops.

Victorian

A bay fronted duo-pitched roof with a central ridge, normally with three or five facets at the front.

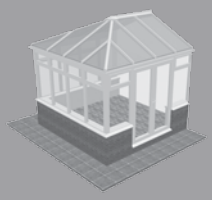
Available in sizes up to 6.5m wide.



Georgian/Edwardian

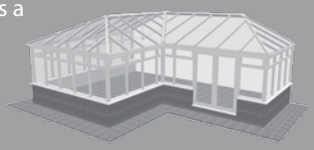
A square fronted duo-pitch roof with a central ridge. A style that maximises floor space.

Available in sizes up to 6.3m wide.



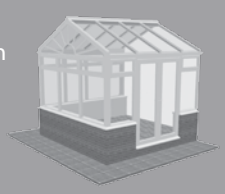
P-shaped

A combination shaped roof usually constructed from a lean-to section at the side of a Victorian/Edwardian shaped roof. This creates a versatile living space.



Gable

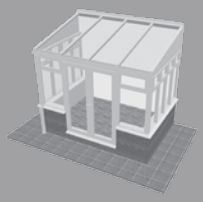
Gable ended roofs are a variant of the Edwardian style roof and consist of duo-pitched sides with a flat faced frontage. These can include the use of a decorative designed gable frame.



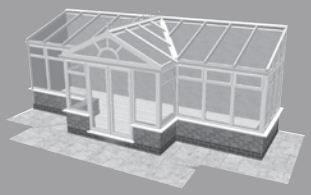
Sizes

The Global roof system is capable of wide-spans due to its robust design. Alternatively, Synseal's SkySpace portal frame solutions enable super-sized bespoke designs with wide-spans to be constructed easily.

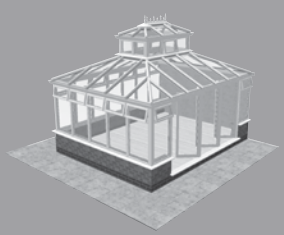
Lean-to
A conservatory with a mono pitched roof. The pitch of the roof can be varied making it a versatile option. Pitches as low as 2.5˚ can be accommodated by the Global 600 lean-to-roof.



T-shaped
Another combination roof style. T-shaped conservatories are aesthetically balanced and create a versatile living space.



Lantern
Distinguished by two tiered roofs, the Lantern design adds light, height, space and grandeur.



Custom
Global conservatory roofs are bespoke manufactured and Synseal's technical and design teams are on hand to evaluate design options and help find the best possible solution.

Wide-span designs

System design enhancements allow Global roofs incorporating glass or polycarbonate glazing with wide spans of over 6m. The robust design of the Global roof system makes it the perfect solution for large conservatory projects.

Long transom and hip rafters can feature additional pre-fitted bolsters fixed to the underside of the bars for added strength.

To meet consumer demand, the footprints of conservatory living spaces in both Georgian and Victorian style can now be extended to offer wide-span designs.

Roofs up to 6.5m wide

After extensive testing by CMT, an independent UCAS approved company, the Synseal eaves beam has been tested to 2 tons and will support a Georgian roof up to 6.3m and a Victorian roof up to 6.5m wide.

Openings up to 5m wide

To provide the wider openings that increasingly popular bi-fold doors require, Synseal have developed a bi-fold door support, which combined with their heavy duty eaves beam can accommodate doors up to 5m wide.

Heavy duty eaves beam

Bi-fold doors can open up virtually the whole side of a conservatory to provide added space and flexible access to adjacent gardens. Synseal has created the perfect bi-fold door solution that ensures their effective operation in use, featuring a heavy duty eaves beam that will support an opening of up to 5m in width (depending on the style of conservatory and the location of the opening).

Heavy duty eaves beam at-a-glance

- Designed for ease of installation and flexibility of use, available in a choice of two profile lengths
- Manufactured from aluminium with weather resistant PVC-U claddings, available in a range of colours
- The most cost-efficient support solution available, eliminating the need for expensive steel structures or the unnecessary expense of continuing the wide span support around all of the conservatory elevations, as frame height can be simply altered by 50mm on the remaining elevations to allow for the height of the additional bi-fold door support

SkySpace portal frames

Global Summer orangery style large conservatory using a SkySpace portal frame structure

For super-sized conservatories and architectural wide-span glazed structures, SkySpace aluminium portal frames can be custom designed to carry Global roof assemblies and meet specific project requirements.

Portal frame aluminium profiles bolt together and include purlins and welded angled trusses, as required. Bespoke SkySpace portal frames are test-assembled on the factory floor to check precision of manufacture, prior to despatch.

This approach suits projects sized from 30m^2 to 2000m^2 and unsupported clear spans of up to 35m can be achieved using the SkySpace system.

SkySpace aluminium portal frames are an ideal specification for swimming pool enclosures, able to easily cope with exposure to chlorine and constant high humidity levels.

Eaves purlin - exploded view

Hotel leisure centre

Banqueting atrium

Bespoke structures for unique spaces

Installations

Coloured roofs to suit each project

Conservatory roofs can be supplied in traditional woodgrain and painted effect foils in a range of popular, eye-catching colours.

Different foil finishes can also be applied to inside and outside conservatory faces, as required – for example, an eye-catching external colour combined with White internally is a typical specification.

Woodgrain White

Cherrywood

Golden Oak

Mahogany

Cream

Chartwell Green

Grey

Black/Brown

The colours shown are designed as a guide to the Woodgrain and Artisan Woodgrain Collection. Before making your final decision, please ensure you have seen a foil swatch.

Global Plus aluminium roof components are available in White, Brown and Caramel powder coated finishes and also mill finish, for powder coating in a RAL colour according to specification before supply.

Finials and crestings

One of the most visually striking and classical design aspects of a conservatory are the finials and crestings. The interlocking PVC-U sections of the Global roof crestings incorporate an interlock to ensure that once connected they remain in a perfect line. A range of decorative finial designs are available in suited colours to match the roof.

Ball finial and Shield cresting

Global finial & Global cresting

Stud finial and non decorative cresting

Shield finial and cresting

Global Plus aluminium finial and cresting

Glazing options

Sealed IGU products, custom-made to specification

The need to control solar glare in summer and minimise heat loss in winter calls for the selection of high performance toughened and annealed roof glass.

24mm double glazing is a typical roof glass specification, comprised of either 4:16:4 or 4:14:6.4 units, as the weight of these units is easily handled by the roof structure.

globalglass®

A range of roof glass solutions is available from Global Glass, including solar control, low maintenance, Low E and gas filled options.

Solar control glass

Solar coated glass is commonly used on conservatory roofs to help prevent the build-up of heat during the hot summer months. The coating on the glass helps reflect heat from the sun back to the outside atmosphere, giving a more comfortable and useable living space. The glass is available in a range of tints which allows the glass to absorb more heat, whilst the coating reflects heat back to the outside.

Low maintenance glass

A revolutionary low maintenance coating is applied to the glass as part of the manufacturing process, which means that it is fused to the surface of the glass and therefore lasts the lifetime of the pane. The coating uses the rain and natural light from the sun to efficiently combat the dirt and grime that accumulates on the outside of the window. By reducing the need for manual cleaning, low maintenance glass provides an ideal and safe solution for keeping hard to reach or hazardous glazed surfaces clean.

Normal glass

Low maintenance glass

Double glazed units with spacer bar options

Low E glass

Low E glass has a microscopic metal coating which reflects heat back into the room. DG units incorporating this specially coated glass offer up to 33% more insulation than conventional insulated glass units.

Polycarbonate

Polycarbonate is a lightweight insulating glazing product manufactured from damage resistant material and available in a range of colours. Added protection provides resistance against the effects of UV weathering.

Polycarbonate is inherently strong and provides both economy and practicality - being sold in flexible sheets which are supplied cut to size and can even be trimmed on site if necessary. Today mainly 35mm and some 25mm thick polycarbonate is used for conservatory roofing, but the trend is that more consumers prefer the quality and visual clarity of high-performance glass.

Bronze

Silver Opal

Clear

Opal

CELSIUS™
PERFORMANCE GLASS

Global Summer interior finished in Chartwell Green with Celsius Elite high performance glass

Celsius Performance Glass utilises a Low E and solar control combination coating, with an Argon filled cavity, to control the amount of visible light, UV and heat that pass through the glazed unit. Easy Clean technology has also been added to reduce maintenance requirements.

	Standard Glass	25mm Polycarbonate	CELSIUS One™ PERFORMANCE GLASS	CELSIUS Elite™ PERFORMANCE GLASS	CELSIUS Clear™ PERFORMANCE GLASS
U-value	2.8	1.6	1.0	0.9	1.0
Solar factor	75%	55%	22%	22%	42%
Visible light transmission	80%	68%	38%	34%	61%
Heat reflection	25%	45%	78%	78%	58%
UV protection	25%	45% (bronze)	94%	94%	73%
Toughened to BS EN 12150-1	✓	✗	✓	✓	✓
Manufactured to BS EN 1279-2	✓	✗	✓	✓	✓
10 year warranty against seal failure	✓	✗	✓	✓	✓
Easy coat cleaning	✗	✗	✓	✓	✓
Cavity fill	Air	✗	Argon	Argon	Argon
Tinted	✗	✗	Blue tint	Blue tint	Neutral tint

The at-a-glance comparison figures shown are for guidance purposes only. Slight variations may occur due to glass specification, time of year, manufacturing tolerance, point of manufacture and type of instrumentation used.

Solar Factor: The percentage of total energy (heat) from the sun which is able to pass through the glass.
Visible Light Transmission: The percentage of visible light which is directly transmitted through the glass.
UV Protection: The percentage of damaging UV rays from the sun which is unable to pass through the glass.

globalsummer

Orangery style & elegance

Global Summer is a design enhancement of the proven Global conservatory roof that provides a cost-effective orangery solution. Global Summer delivers the distinguished look of a traditional orangery without the need for expensive parapet walls, leak prone flat roofs or the added engineering complexity of a lantern roof.

As simple to install as the rest of the Global range, Global Summer uses high-quality aluminium decorative gutter fascias and internal pelmet pods that hook onto the eaves beam to create a soffit feature detail. These unique pelmet pods provide a rigid former for plastering to and allow downlighters or speakers to be incorporated into the internal soffit for added consumer appeal.

Two fitting options

Global Summer has two main fitting options - raised line and low line - which alters the height that the decorative gutter fascia sits above the conservatory windows.

Raised line installation

Raised line installations use the orangery eaves beam extender beneath a standard eaves beam to lift the roof 170mm over the frames and provide increased space between the pelmet pod internal soffit and the roof. This increased height adds grandeur to Global Summer installations and delivers a more authentic orangery look.

Low line installation

Low line installations use a 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.

T-shaped Chartwell Green Global Summer installation with gable-end mid section

Decorative pilasters

Decorative pilasters are an eye-catching feature which help to evoke the aesthetics of classical orangery design. Manufactured in GRP and available in White, Blu White, Cream or Chartwell Green painted finishes, the pilasters perfectly complement the roof, include self-draining flutes and are a beautiful addition to any raised line Global Summer installation.

Designed to enable conservatory installers to offer an attractive and easy to install orangery solution - Global Summer provides stylish aesthetic appeal with additional practical benefits, such as incorporating downlighters into the pelmet section which add value and enhance the Global conservatory roof system.

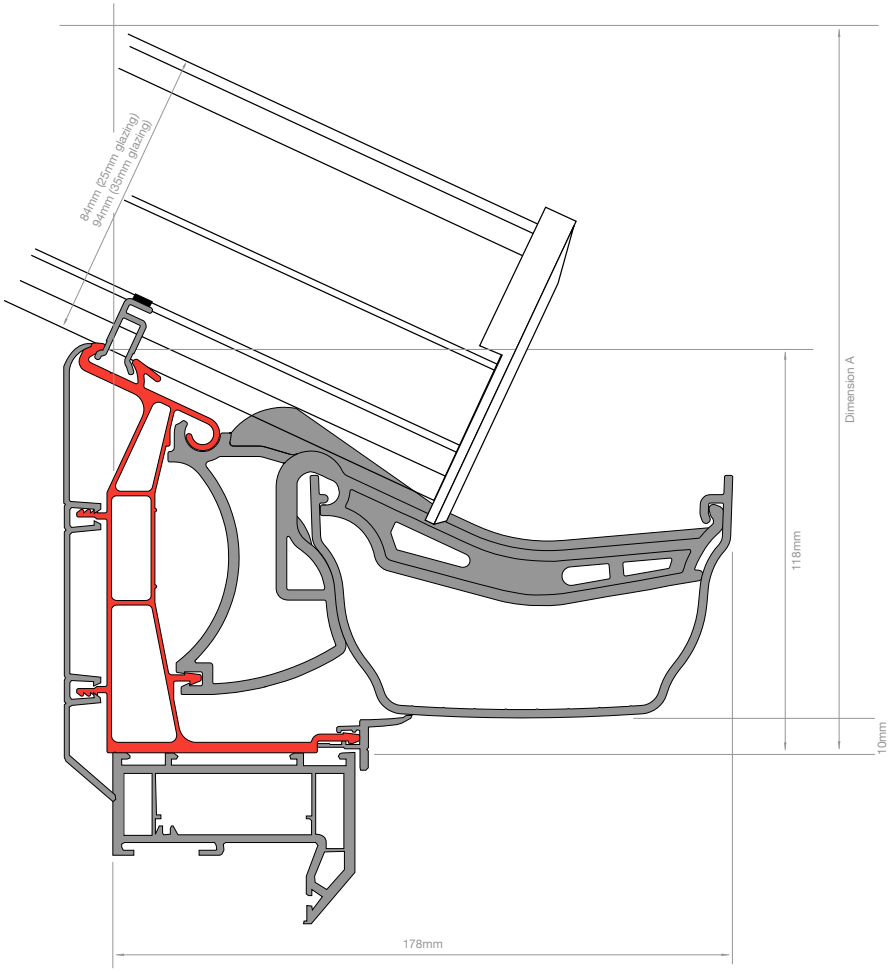
Eaves beam cross section

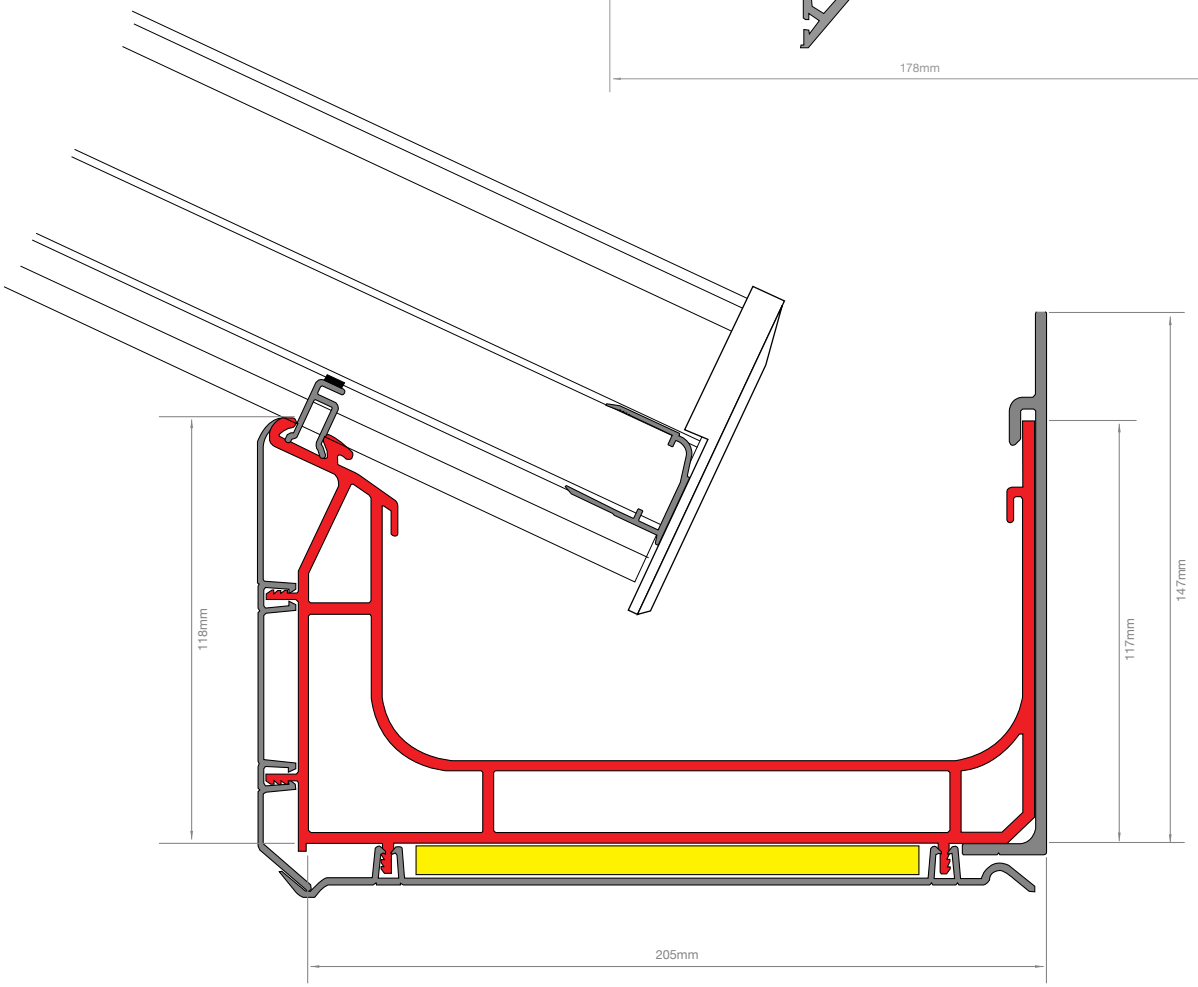
24/25mm glazing

Roof pitch	Dimension A
5˚	199mm
15˚	202mm
25˚	208mm
35˚	218mm

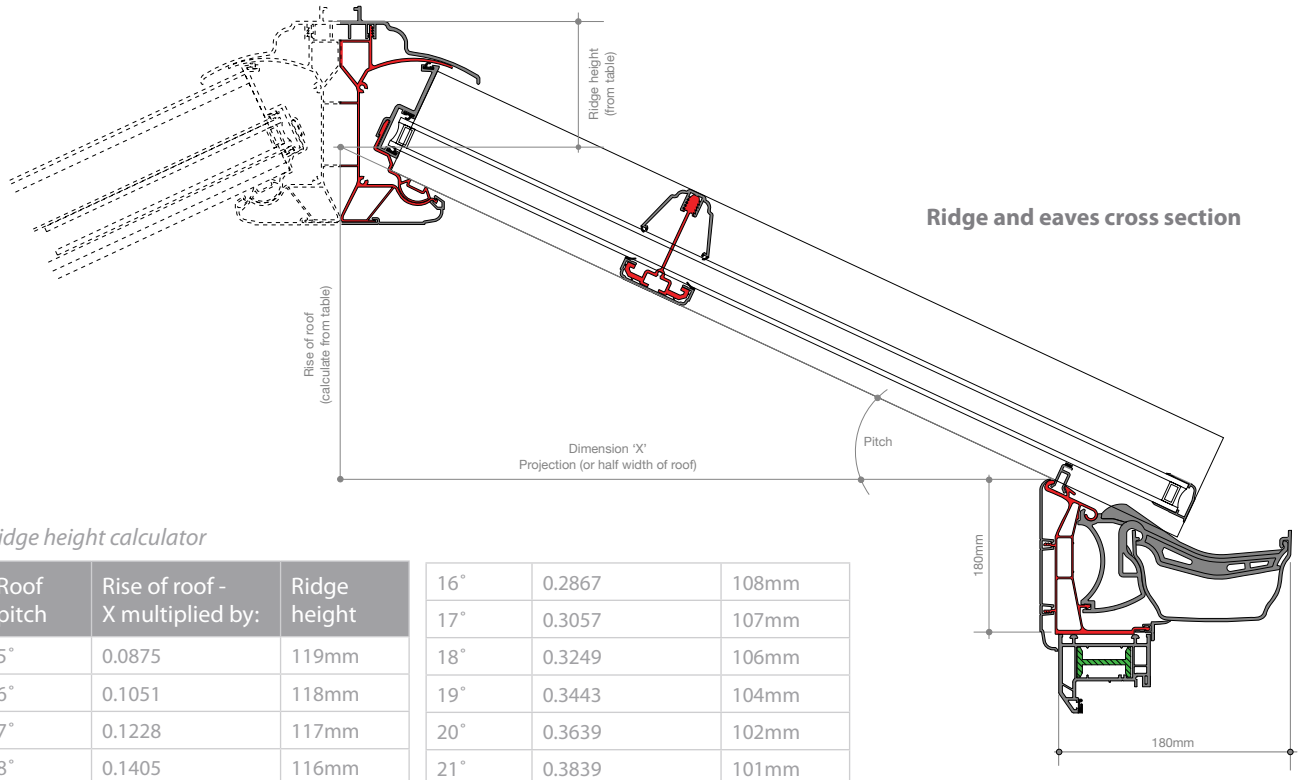
35mm glazing

Roof pitch	Dimension A
5˚	208mm
15˚	212mm
25˚	219mm
35˚	230mm





Box gutter cross section

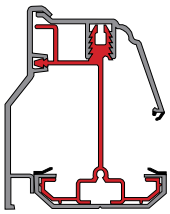


Ridge and eaves cross section

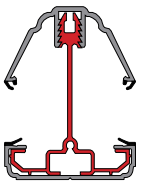
Ridge height calculator

Roof pitch	Rise of roof - X multiplied by:	Ridge height
5˚	0.0875	119mm
6˚	0.1051	118mm
7˚	0.1228	117mm
8˚	0.1405	116mm
9˚	0.1584	115mm
10˚	0.1763	114mm
11˚	0.1944	113mm
12˚	0.2125	112mm
13˚	0.2309	111mm
14˚	0.2493	110mm
15˚	0.2679	109mm
16˚	0.2867	108mm
17˚	0.3057	107mm
18˚	0.3249	106mm
19˚	0.3443	104mm
20˚	0.3639	102mm
21˚	0.3839	101mm
22˚	0.4041	99mm
23˚	0.4245	98mm
24˚	0.4452	97mm
25˚	0.4663	96mm
26˚	0.4877	95mm
27˚	0.5095	94mm
28˚	0.5317	92mm
29˚	0.5543	90mm
30˚	0.5773	88mm
31˚	0.6009	87mm
32˚	0.6249	86mm
33˚	0.6494	85mm
34˚	0.6745	84mm
35˚	0.7002	82mm

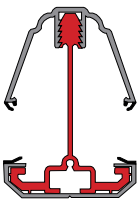
25mm rafter cross sections



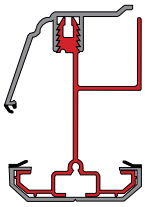
XER1 **Light End Rafter**
XERC25 Top Cap
XBC1 Bottom Cap
XERC1 Side Cap



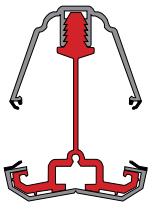
XJR1 **Jack Rafter**
XJC25 Top Cap
XBC3 Bottom Cap



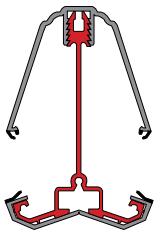
XT2 **Medium Transom Rafter**
XRC25 Top Cap
XBC1 Bottom Cap



XER3 **Wall Rafter**
XERC25 Top Cap
XBC1 Bottom Cap

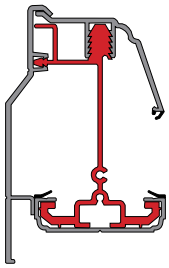


XVH3 **Heavy Victorian Hip Rafter**
XRC25 Top Cap
XBC1 Bottom Cap

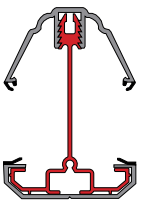


XGH1 **Light Georgian Hip Rafter**
XGC25 Top Cap
XBC1 Bottom Cap

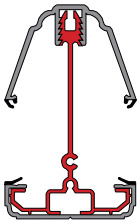
35mm rafter cross sections



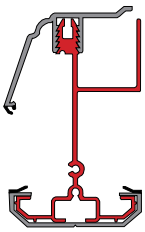
X35ER2 **Medium End Rafter**
XERC25 Top Cap
XBC3 Bottom Cap
XERC2 Side Cap



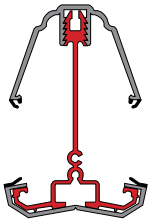
XT1 **Jack Rafter**
XJC25 Top Cap
XBC1 Bottom Cap



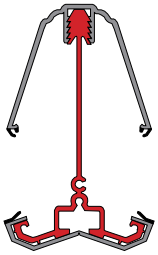
X35T1 **Light Transom Rafter**
XRC25 Top Cap
XBC3 Bottom Cap



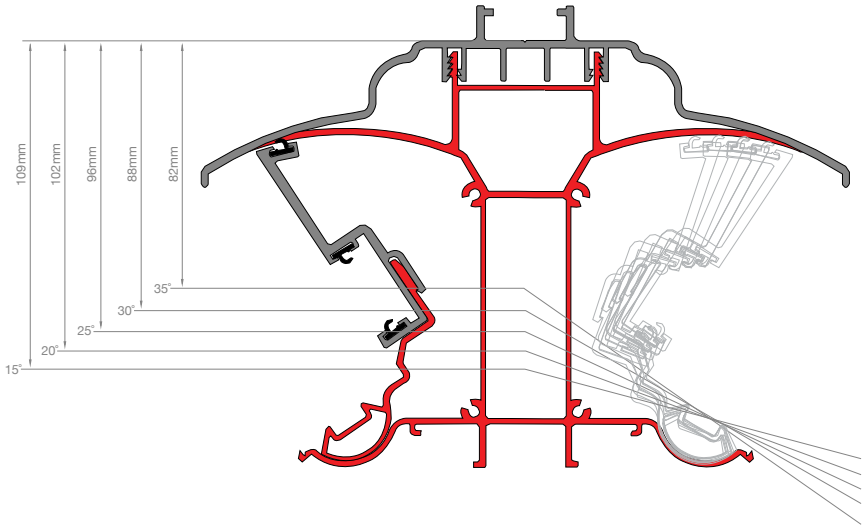
X35ER3 **Wall Rafter**
XERC25 Top Cap
XBC1 Bottom Cap



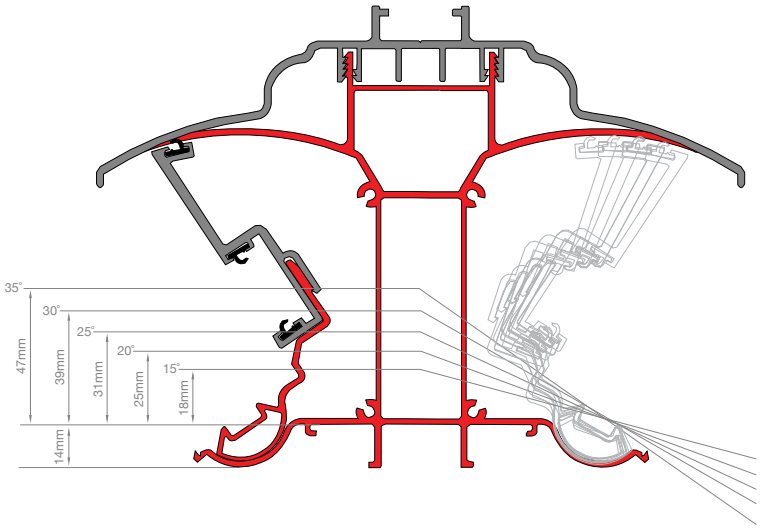
X35VH1 **Light Victorian Hip Rafter**
XRC25 Top Cap
XBC1 Bottom Cap



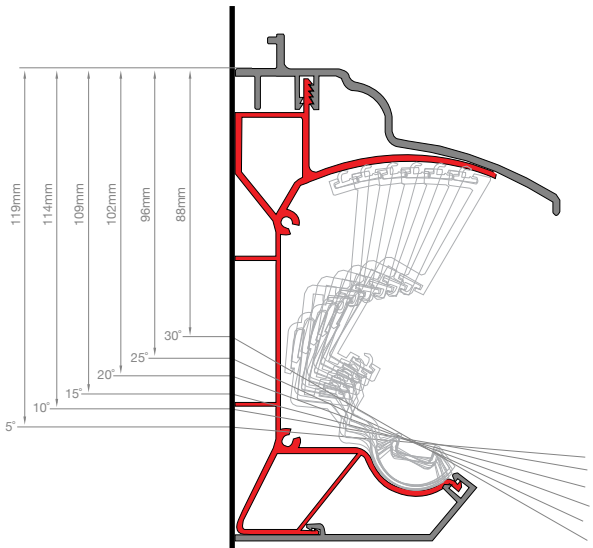
X35GH2 **Medium Georgian Hip Rafter**
XGC25 Top Cap
XBC1 Bottom Cap



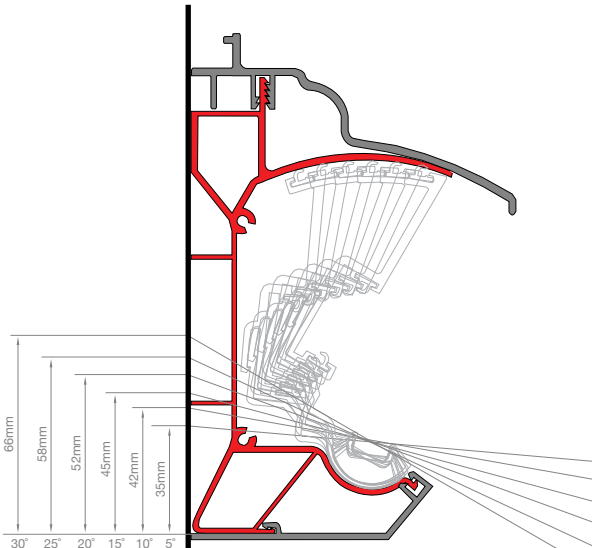
Top of ridge height based on wire frame



Underside of ridge height based on wire frame



Top of wallplate height based on wire frame



Underside of wallplate height based on wire frame

Gutter

XYGUT2
Eaves/Standard Gutter

XYGIT2
Gutter Infill Trim for XYGUT2

XGC5
Eaves Gutter Bracket

XYR910
Screwfix Gutter Bracket

XYR908
Gutter Union

XYR935
90° External Bend

XYR945
90° Internal Bend

XYRBGT
Gutter 'T' Piece

XYRSY1
Running Outlet

XYRSY2
External Stop End (flat ended) - use with XYR400 to create stop end outlet

XC9077BLK
Gutter Spigot

XYR902
Internal Stop End

XYR913
External Stop End

XYR937
135° External Bend

XYR947
135° Internal Bend

XYR999
150° External Bend

XYDP1
Downpipe

XYR17
Downpipe Coupler

XYR19
Downpipe Bracket

XYR24
Variable Downpipe Bend

XYR20
112.5° Downpipe Bend
XYR577
92.5° Downpipe Bend

XYR2I
Downpipe Shoe

XGA2L
Box Gutter Adaptor Left Hand

XGA2R
Box Gutter Adaptor Right Hand

Eaves Beam

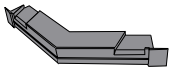
XEB6
Shield Eaves Beam

XBGJ2
Eaves Box Gutter Joiner

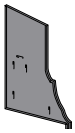
XEEJ2
Eaves Beam to Beam Jointer

XGSP2
Gable Support Platform

XPS1
Glazing Support Section



XUGT135
135° Under Gutter Trim



XEBC6
Eaves Beam End Cap (pair)

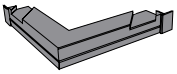
XEBC6-AL
Eaves Beam End Cap (pair)

XGIW1
Gable Infill Wedge Suitable for 25°-35°

XPS2
Glazing Support Trim Adaptor

XPS3
Glazing Support Trim Adaptor (for Georgian Hips)

XEB7
Global Eaves Beam



XUGT90
90° Under Gutter Trim

XUGT180
180° Under Gutter Trim

XEBC5
Gable Support Clad

XPS4
Glazing Support Trim Adaptor (to suit SynerJy)

XPS5
Glazing Support Trim Adaptor (for Georgian Hips to suit SynerJy)

XSC1-90
90° External Eaves Beam to Eaves Beam Bracket (to be used with XSC2-90)

XSC1-135
135° External Eaves Beam to Eaves Beam Bracket (to be used with XSC2-150)

XSC1-150
150° External Eaves Beam to Eaves Beam Bracket (to be used with XSC2-150)

XSC2-90
90° Internal Eaves Beam to Eaves Beam Bracket (to be used with XSC1-90)

XSC2-135
135° Internal Eaves Beam to Eaves Beam Bracket (to be used with XSC1-135)

XSC2-150
150° Internal Eaves Beam to Eaves Beam Bracket (to be used with XSC1-150)

Bi-fold

XEB7HD
Heavy Duty Eaves Beam

XBFDS1
Bi-fold Door Support

3FC30
Cover for XBFDS1

XBFDSF
Bi-fold Door Support Foam (50m roll)

All components are available in different colours - the codes shown are for 'White'.

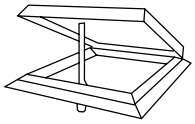
Colour key: Plastic | Aluminium | Rubber | Steel | Other | Mixed component

Component colours available: Mahogany | Brown | Caramel | Cherrywood | Golden Oak | Black (B - only foam components)

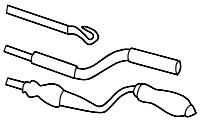
dc = dual colour | White (no additional suffix) | Blu White (BLU) | Gloss Finish White Aluminium (GWA)

Component chart

Roof Ancillaries



XRV25
Roof Vent (25mm glazing)
XRV35
Roof Vent (35mm glazing)
dc

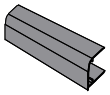


XRVP2/XRVP3
Brass Roof Vent Pole/Chrome Roof Vent Pole

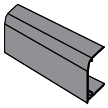
XGWP1
Conservatory Glazing Wedge
Packers for Glass Roofs

XRVC3
Climate Control Unit
(includes rain sensor)

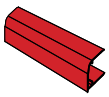
XTB5
5-Way Tie Bar Assembly



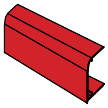
XSPEC25
Sculptured Roof
Sheet End Closer
(to suit 25mm)



XSPEC35
Sculptured Roof
Sheet End Closer
(to suit 35mm)



XSPEC25-AL
Sculptured Roof
Sheet End Closer
(to suit 25mm)

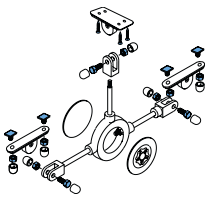


XSPEC35-AL
Sculptured Roof
Sheet End Closer
(to suit 35mm)

XMS
24mm Muntin Bar
dc

XRVE1
Roof Vent Motor (requires
item XRVC3 or XRVS1)

XRVS1
Roof Vent Motor
Switch (white only)



XTB1
3-Way Tie Bar Assembly
also in chrome & brass

XMS-AL
25mm Muntin Bar

XMUNT35P
25mm to 35mm
Muntin Bar
Conversion Strip

XJRK1
Jack Rafter to Hip
Connecting Kit

XM825P
Rafter to Eaves Beam
Fixing Nuts and Bolts

XM830P
Rafter to Ridge
Fixing Nuts and Bolts

XGFP1
Gable Fixing Plate

XM625P
Radius End to XRE1
Fixing Nuts and Bolts

XM525P
XRE1 to Ridge Body
Machine Screw

XM828
28mm Tie Bolt
XM838
38mm Tie Bolt

XM843
43mm Tie Bolt
XM853
53mm Tie Bolt

XFEF1
Shield Eaves
Turnbuckle to Frame
Connecting Kit

XEC3
Rafter End Cap to
Rafter Machine
Screw Cap

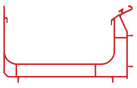
XM48-12
Eaves Beam
Joiner/Ridge Carriage
Self Drilling Screws

XM420P
End Cap
Machine Screw

XGS123P
Glass Kit
(XGS4P for long span rafters)

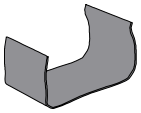
Box Gutter

XBGSE1
Box Gutter Stop End
(aluminium plate)

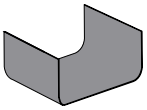


XBG6
Box Gutter Body

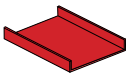
XBGE2L
Box Gutter End
Cap Left Hand
XBGE2R
Box Gutter End
Cap Right Hand



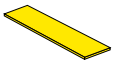
XBGT
Box Gutter Adaptor and
Connector Flashing Piece



XGA2I
Box Gutter
In-line Connector



XBGJ3
Box Gutter Joiner



XBGF
Insulation Foam
XBGF2
Box Gutter Foam Insert

XBGC1
Box Gutter Bottom Clad

XGB3
Box Gutter
Support Bracket

XBGFP
Box Gutter Fixing Plate

XBG3
Parabolic Head for Raised
Back Box Gutter

XBGF3
Box Gutter Foam Insert

XBGCJ90I
Box Gutter Clad Jointer Internal
XBGCJ90E
Box Gutter Clad Jointer External

XBGCJ180
Box Gutter Clad Jointer In-line

Eaves Beam & Box Gutter

XEBC2
Internal Eaves Clad/
Box Gutter Side Clad

XEBC7
Internal Eaves Clad/Box Gutter
Side Clad (to suit SynerJy)

XEBC90I
Internal 90°
Eaves Clad Joint

XSEBC90I
Internal 90° Eaves Clad
Joint (to suit SynerJy)

XEBC135
Internal 135°
Eaves Clad Joint

XSEBC135
Internal 135° Eaves Clad
Joint (to suit SynerJy)

XEBC150
Internal 150°
Eaves Clad Joint

XSEBC180
Straight Eaves
Clad Joint
(to suit SynerJy)

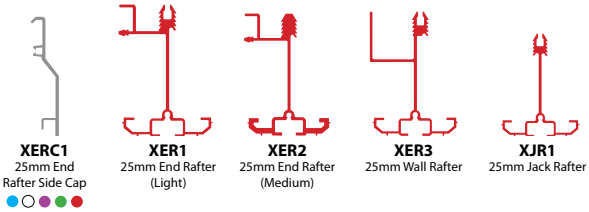
XSEBC150
Internal 150° Eaves Clad
Joint (to suit SynerJy)

XEBC90E
External 90° Eaves
Clad Joint

XSEBC90E
External 90° Eaves Clad
Joint (to suit SynerJy)

XEBC180
Straight Eaves
Clad Joint

25mm Rafter



XERC1 25mm End Rafter Side Cap

XER1 25mm End Rafter (Light)

XER2 25mm End Rafter (Medium)

XER3 25mm Wall Rafter

XJR1 25mm Jack Rafter

XT1 25mm Rafter (Light)

XT2 25mm Transom Rafter (Medium)

XT3 25mm Transom Rafter (Heavy)

XT4 25mm Transom Rafter (Long Span)

XVH1 25mm Victorian Hip Rafter (Light)

XVH2 25mm Victorian Hip Rafter (Medium)

XVH3 25mm Victorian Hip (Heavy)

XVH4 25mm Victorian Hip (Long Span)

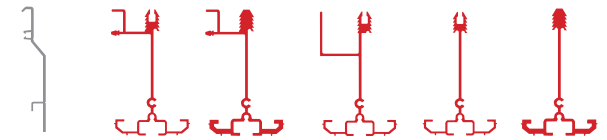
XGH1 25mm Georgian Hip (Light)

XGH2 25mm Georgian Hip (Medium)

XGH3 25mm Georgian Hip (Heavy)

XGH4 25mm Georgian Hip (Long Span)

35mm Rafter



XERC2 35mm End Rafter Side Cap

X35ER1 35mm End Rafter (Light)

X35ER2 35mm End Rafter (Medium)

X35ER3 35mm Wall Rafter

X35T1 35mm Transom Rafter (Light)

X35T2 35mm Transom Rafter (Medium)

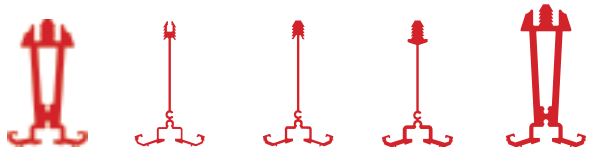
X35T3 35mm Transom Rafter (Heavy)

X35T4 35mm Transom Rafter (Long Span)

X35VH1 35mm Victorian Hip Rafter (Light)

X35VH2 35mm Victorian Hip Rafter (Medium)

X35VH3 35mm Victorian Hip (Heavy)



X35VH4 35mm Victorian Hip (Long Span)

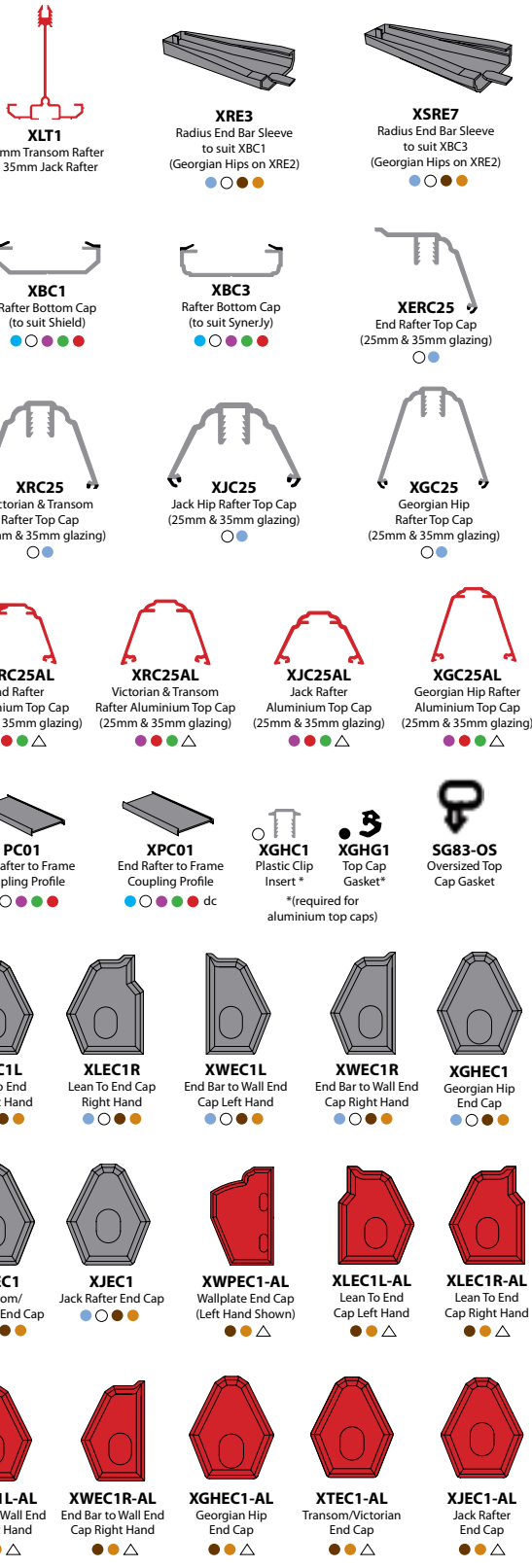
X35GH1 35mm Georgian Hip (Light)

X35GH2 35mm Georgian Hip (Medium)

X35GH3 35mm Georgian Hip (Heavy)

X35GH4 35mm Georgian Hip (Long Span)

25mm & 35mm Rafter



XLT1 25mm Transom Rafter & 35mm Jack Rafter

XRE3 Radius End Bar Sleeve to suit XBC1 (Georgian Hips on XRE2)

XSRE7 Radius End Bar Sleeve to suit XBC3 (Georgian Hips on XRE2)

XBC1 Rafter Bottom Cap (to suit Shield)

XBC3 Rafter Bottom Cap (to suit SynerJy)

XERC25 End Rafter Top Cap (25mm & 35mm glazing)

XRC25 Victorian & Transom Rafter Top Cap (25mm & 35mm glazing)

XJC25 Jack Hip Rafter Top Cap (25mm & 35mm glazing)

XGC25 Georgian Hip Rafter Top Cap (25mm & 35mm glazing)

XERC25AL End Rafter Aluminium Top Cap (25mm & 35mm glazing)

XRC25AL Victorian & Transom Rafter Aluminium Top Cap (25mm & 35mm glazing)

XJC25AL Jack Rafter Aluminium Top Cap (25mm & 35mm glazing)

XGC25AL Georgian Hip Rafter Aluminium Top Cap (25mm & 35mm glazing)

PC01 End Rafter to Frame Coupling Profile

XPC01 End Rafter to Frame Coupling Profile

dc

XGHC1 Plastic Clip Insert *

XGHG1 Top Cap Gasket*

*(required for aluminium top caps)

SG83-OS Oversized Top Cap Gasket

XLEC1L Lean To End Cap Left Hand

XLEC1R Lean To End Cap Right Hand

XWEC1L End Bar to Wall End Cap Left Hand

XWEC1R End Bar to Wall End Cap Right Hand

XGHEC1 Georgian Hip End Cap

XTEC1 Transom/ Victorian End Cap

XJEC1 Jack Rafter End Cap

XWPEC1-AL Wallplate End Cap (Left Hand Shown)

XLEC1L-AL Lean To End Cap Left Hand

XLEC1R-AL Lean To End Cap Right Hand

XWEC1L-AL End Bar to Wall End Cap Left Hand

XWEC1R-AL End Bar to Wall End Cap Right Hand

XGHEC1-AL Georgian Hip End Cap

XTEC1-AL Transom/Victorian End Cap

XJEC1-AL Jack Rafter End Cap

All components are available in different colours - the codes shown are for 'White'.

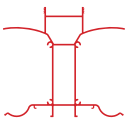
Colour key: Plastic | Aluminium | Rubber | Steel | Other | Mixed component

Component colours available: Mahogany | Brown | Caramel | Cherrywood | Golden Oak | Black (B - only foam components)

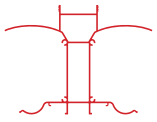
dc = dual colour | White (no additional suffix) | Blu White (BLU) | Gloss Finish White Aluminium (GWA)

Component chart

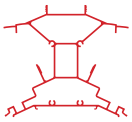
Ridge & Wallplate



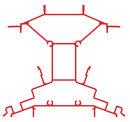
XR25
25mm Ridge Main Body (15°-25°)



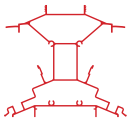
XR35
25mm Ridge Main Body (15°-35°)



XRF25 or XLRF25
25mm Ridge Main Body (Fixed 25°)



XLRF20
25mm Ridge Main Body (Fixed 20°)



XLRF225
25mm Ridge Main Body (Fixed 22.5°)

XRJF1
Ridge Joiner Fixed

XR3
Ridge Under Channel

XRTC2
Ridge Top Cap

XRJV1
Ridge Joiner Variable Ridge

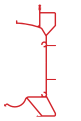
XR2
Ridge Carrier

XRE25
Rain Excluder 25mm

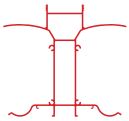
XRE35
Rain Excluder 35mm

XWP10
25mm Wallplate Main Body (5°-10°)

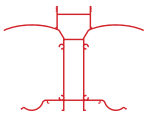
XWP30
25mm Wallplate Main Body (5°-30°)



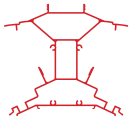
X35WP10
35mm Wallplate Main Body (5° - 10°)



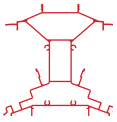
X35R25
35mm Ridge Main Body (15°-25°)



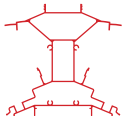
X35R35
35mm Ridge Main Body (15°-35°)



X35RF25 or XL35RF25
35mm Ridge Main Body (Fixed 25°)



XL35RF20
35mm Ridge Main Body (Fixed 20°)



XL35RF225
35mm Ridge Main Body (Fixed 22.5°)

XWPF5
25mm Wallplate Main Body (fixed 5°)

XWPF10
25mm Wallplate (fixed 10°)

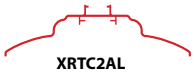
X35WPF5
35mm Wallplate (fixed 5°)

X35WPF10
35mm Wallplate Main Body (5°-30°)

X35WP30
35mm Wallplate Main Body (5°-30°)

XWPC4
Wallplate Top Cap

XWPC4AL
Aluminium Wallplate Top Cap



XRTC2AL
Aluminium Ridge Top Cap (requires XR4)

XR4
Aluminium Ridge Top Cap Clip

XRBC2
Ridge Bottom Cap

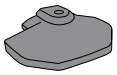
XRBC3
Ridge Bottom Cap (to suit SynerJy)

XPACKER1

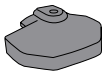
XPACKER2

XPACKER5

XGHP1
Aluminium Georgian Hip Packer

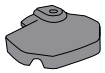


XRECG1
Georgian Radius End Top Cap 15°-24°



XRECG2
Georgian Radius End Top Cap 25° - 35°

XRECG3
Georgian Radius End Top Cap (reduced skirt)



XRECG4
Georgian Radius End Top Cap 25° (no centre rafter)

XRECG5
Georgian Radius End Top Cap 25°

XREG1
Rain Excluder Gasket

XRE2
Standard Radius End

XRE4
Non-standard Radius End

XRECU
Wallplate Radius End Bottom Cap (not handed)

XRECL
Wallplate Radius End Top Cap Left Hand

XRECR
Wallplate Radius End Top Cap Right Hand

XREC15
Victorian Radius End Top Cap 15° 24°

XREC25
Victorian Radius End Top Cap 25° 35°

XFT1
Ridge Top Cap Flashing Trim

XFT2
Ridge Top Cap In-Line Joiner

XPT90
P/T Ridge Top Cap Corner Cover

XREC2
Radius End Bottom Cap

XREC2/1
Radius End Bottom Cap

XRE1
Radius End to Ridge Connector

XRE1/N
Radius End to Ridge Connector (notched for glass)

XRE5
Radius End Foam Bung

XWPC2
Wallplate Bottom Cap

XWPC5
Wallplate Bottom Cap (to suit SynerJy)

XWPEC1L/R
Wallplate End Cap (left hand shown)

XLPWEC1L/R
Fixed Wallplate End Cap (left hand shown)

XREC6
Large Radius End Bottom Cap

XRECTK
Radius End Top and Bottom Cap Template Kit

XGEC1
Gable End Ridge Top Cap

XCRE1
Shield Cresting

XFIN1
Shield Finial

XCRE2
Global Cresting

XFIN2
Global Finial

XNDF1
Pip/Stub Finial

XNDF2
Ball Finial

XTBRC1
Tiebar to Radius End Connector

XNDCAL
Non Decorative Cresting

XREC3
Radius End Top Cap Fixing Rivets

XRE4
M8 Nut Covers

XGEC1-AL
Gable End Ridge Top Cap

XRECL-AL
Wallplate Radius End Top Cap Left Hand

XRECR-AL
Wallplate Radius End Top Cap Right Hand

XREC-AL
Victorian Radius End Top Cap

XFIN3-AL
Finial

XCRE3-AL
Cresting

Bolster

XBOLC1AL
Bolster Cladding

XBEC1
Bolster End Cap

XB3
Bolster Bar

XGHC1
Plastic Clip Insert
(required for bolster cladding)

Valley Rafter

XVA3
25mm Valley Body

X35VA3
35mm Valley Body

XVTC1
Valley Body Top Clad

XVEC1-AL
Valley End Cap

XVEC1
Valley End Cap

ST510
Security Tape for Valley Wing

XEBC2
Valley Wing Internal Clad
(2 per Valley required)

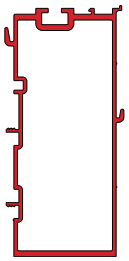
XEB7
Valley Wing Internal
Clad to suit SynerJy
(2 per Valley required)

XVTC2AL
Valley Body Top Clad (wing)
Aluminium (2 per XVTC1AL required)

XVTC1AL
Valley Body Top Clad
(centre) Aluminium

XVA2
Valley Wing
(2 per Valley required)

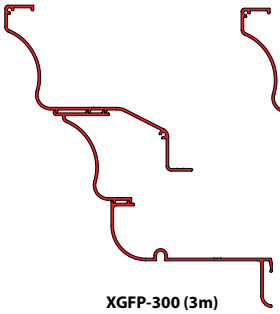
Eaves Beam



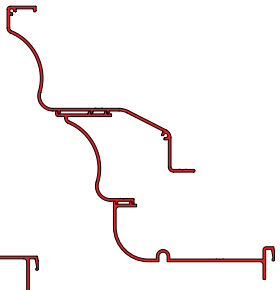
XOEB1
Orangery Eaves Beam Extender

XGUTFC
Aluminium Gutter
Fascia Clip

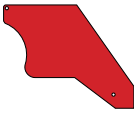
Gutter Fascia Extensions



XGFP-300 (3m)
XGFP-400 (4m)
XGFP-500 (5m)
Gutter Fascia Kit, all 3
parts supplied as a kit



XGFP2-300 (3m)
XGFP2-400 (4m)
XGFP2-500 (5m)
Gutter Fascia Kit, all 3 parts supplied as a kit
(Retro fit option - only compatible with XEB6 and XEB7)



XGUTF-PLT
End Plate (Mill finish)

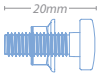
XGUTF-PLT2
End Plate (Mill finish)

Screws & Bolts

XM48-12
M4.8 x 12mm

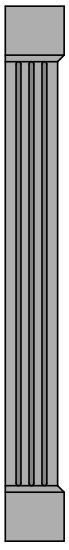
XM4819SS
M4.8 x 19mm

XM420
M4 x 20mm



XM825
25mm

Pilasters



XDPC
90º Corner Pilaster

XDPI
180º Inline Pilaster

XDPWL
Decorative Pilaster
(For left hand wall
- as viewed facing
the conservatory)

XDPWR
Decorative Pilaster
(For right hand wall
- as viewed facing
the conservatory)

XDPWLC
Decorative Pilaster
(For left hand wall
with cut-out)

XDPWRC
Decorative Pilaster
(For right hand wall
with cut-out)

XDPWLC-BG
Decorative Pilaster
(For left hand wall with
cut-out to suit box gutter)

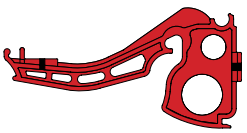
XDPWRC-BG
Decorative Pilaster
(For right hand wall with
cut-out to suit box gutter)

XDPR2
Insert Connection
(For XDPR1)

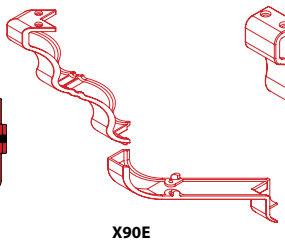
XDPR1
Two Part Aluminium
Frame Connector

XDPVAC
Decorative Pilaster
Aperture Cover

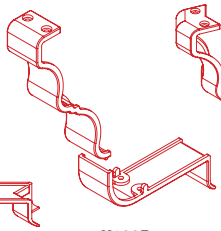
Castings



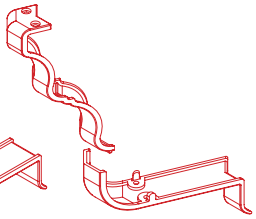
XGUTF-GC5
Gutter Bracket



X90E
90° External Fascia Corner

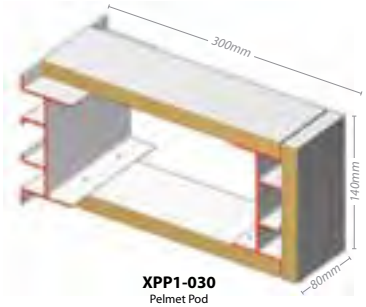


X180E
180° Inline Gutter Fascia Cover

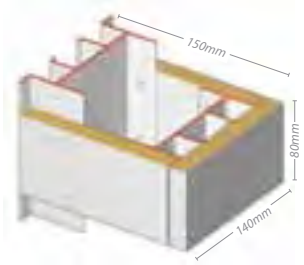


X135E
135° External Fascia Corner

Pelmet Pods



XPP1-030
Pelmet Pod



XMP1-015
Mullion Pod
(Suitable for a 50mm cavity wall)

XFB300-500
Flatboard

Technical support

At Synseal an experienced and skilled customer care team is always on hand to provide technical advice, answer any conservatory roof or roof glazing-related questions and assist with project enquiries.

Quality

Global roofs carry a 10 year guarantee, with manufacture and supply carried out under certificated BS EN ISO9001:2000 quality management systems.

Technical compliance – UK specification

Building Regulations Part A1 concerning loading of buildings is a key reference document when designing glazed roof structures. All weather parameters for specific site postcode, including an assessment of the local terrain and topography, prevailing wind speeds and pressures, are taken into account to determine how the roof will be constructed.

Global roof sare designed to meet the requirements of:

- **BS 8118-1:1991**
  (Code Of Practice For Structural Use Of Aluminium)
- **BS 6399-2:1997**
  (Code Of Practice For Wind Loads)
- **BS 6399-3:1998**
  (Code Of Practice For Imposed Wind Loads)

Victorian design with glass roof

Building Regulations Part K4 should be consulted if glazed building elements are sited adjacent to busy pedestrian areas. In such situations, windows projecting internally or externally beyond 100mm should be sited 2 metres above floor or ground level, or barriers fitted to protect the public from collision.

Building Regulations Part L refers to different building types and itemise thermal U-value performance. Standards for refurbishment of existing buildings are more exacting and provide options for using WER 'whole unit' calculations in place of the established U-values. BRE 443 is a U-value reference document for non-vertical glazed surfaces.

Note: A-rated WER solutions for the whole window, frames and glass, can deliver insulation U-values as low as 0.8 W/m^{2}K. A-rated DSER (Door Set Energy Rating) solutions are now also available, enabling specification of thermally-efficient glazed wall envelopes encompassing both windows and doors.

Building Regulations Part M highlights the need for doors to be fitted with low thresholds to ensure easy access for all, including wheelchair users.

Building Regulations Part N specifies rules for visual manifestation of glazed elements, such as entrance doors, and deals with provision of access for cleaning.

U-shaped bespoke design providing dual living areas

Large Edwardian conservatory

Part of Synseal's fleet of 39 delivery vehicles

Ridge radius end assembly

Synseal's main site and manufacturing centre

Full length glazing

Synseal is a leading UK manufacturer of conservatory roof, window and door systems

Global is the UK's No 1 conservatory roof system from Synseal Extrusions Ltd. Established over 30 years ago, Synseal now employs over 900 people and has a turnover in excess of £100 million. Main operations are located at a UK-based 35 acre site with 70,000 square metres of production, warehousing and office facilities.

The corporate objective at Synseal is to deliver thermally efficient products of consistently excellent quality and design to markets worldwide, at competitive prices.

Synseal constantly seeks to develop environmentally friendly new products which will support sustainable development and reduce carbon consumption. New ranges are designed with 100% recyclability, improved performance and cost-effectiveness in mind.

Synseal is **ISO14001 accredited** which ensures that all company environmental management systems comply with and even exceed government mandates.

All quality management systems are **ISO9001 accredited** which ensures that all processes are constantly checked and improved upon, to reduce waste and increase efficiency.

Synseal products are independently tested and accredited by the British Standards Institute (**BSI**) and the British Board of Agrément (**BBA**).

ISO14001
Environmental management accreditation

BBA
Construction industry accreditation

ISO9001
Quality systems accreditation

synseal®

Tel 01623 443200 | **Fax** 01623 550243 | **www.synseal.com**
Synseal Extrusions Ltd. | Common Road | Huthwaite | Nottinghamshire | NG17 6AD

ZMGT/BROCHUREv2