

Technical Guide

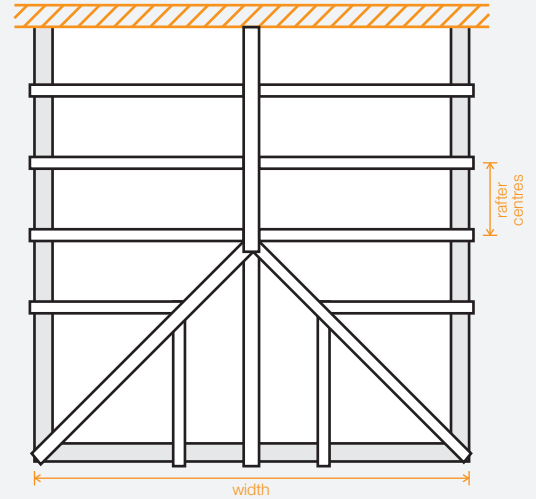
SPECIFIERS AND INSTALLERS



Design parameters
for the SupaLite
Tiled Roof System

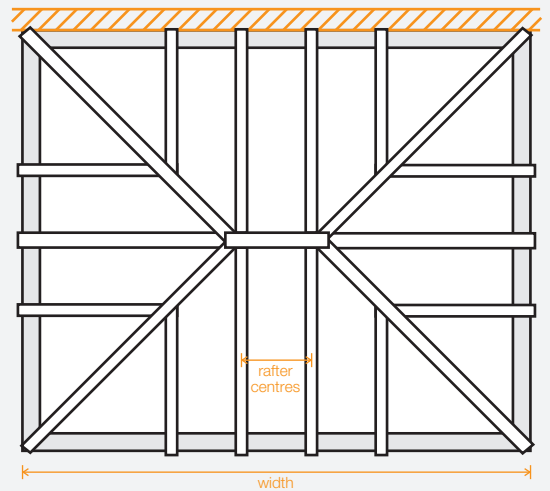
Edwardian

Standard Rafter / Standard Hip	Max Width	5250mm
Heavy Duty Rafter / Heavy Duty Hip	Max Width	6500mm
ECO Roof	Max Width	4000mm
Rafters	Max Centres	635mm
Roof Pitch	Min / Max Angle	15° / 30°
35° Pitch	Roofs can be made up to 35°, however the ridges will need cutting in manually on-site. No external 3 or 5 way is supplied over 30°	
Tie Bars	Tie bars are only required on Edwardian roofs with a ridge length exceeding 3500mm	



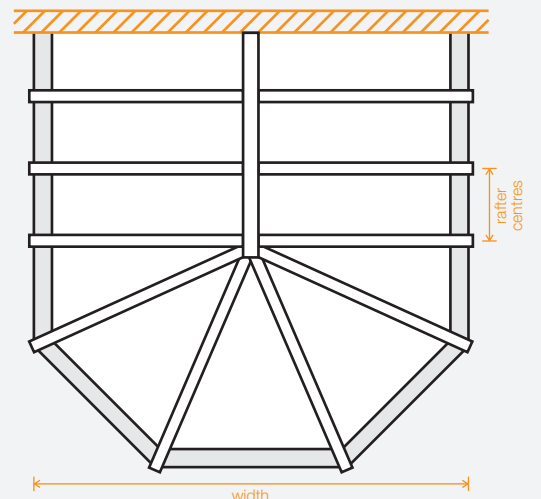
Edwardian Double Hip

Standard Rafter / Standard Hip	Max Width	5250mm
Heavy Duty Rafter / Heavy Duty Hip	Max Width	6500mm
ECO Roof	Max Width	4000mm
Rafters	Max Centres	635mm
Roof Pitch	Min / Max Angle	15° / 30°
35° Pitch	Roofs can be made up to 35°, however the ridges will need cutting in manually on-site. No external 3 or 5 way is supplied over 30°	
Tie Bars	Tie bars are only required on Edwardian roofs with a ridge length exceeding 3000mm	



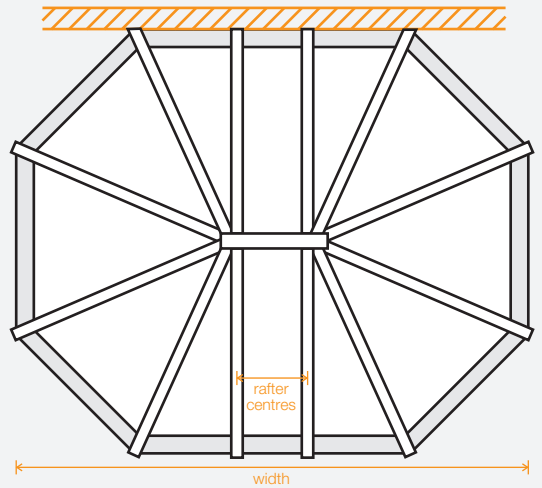
Victorian

Standard Rafter / Standard Hip	Max Width	5250mm
Heavy Duty Rafter / Heavy Duty Hip	Max Width	6500mm
ECO Roof	Max Width	4000mm
Rafters	Max Centres	635mm
Roof Pitch	Min / Max Angle	15° / 30°
35° Pitch	Roofs can be made up to 35°, however the ridges will need cutting in manually on-site. No external 3 or 5 way is supplied over 30°	
Tie Bars	Tie bars are only required on Victorian roofs with a ridge length exceeding 3500mm	



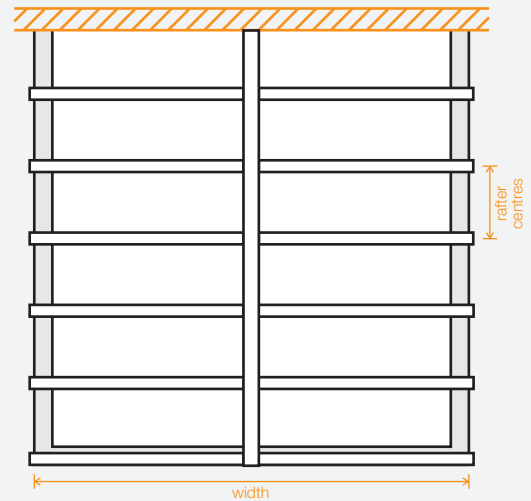
Victorian Double Hip

Standard Rafter / Standard Hip	Max Width	5250mm
Heavy Duty Rafter / Heavy Duty Hip	Max Width	6500mm
Rafters	Max Centres	635mm
Roof Pitch	Min / Max Angle	15° / 30°
35° Pitch	Roofs can be made up to 35°, however the ridges will need cutting in manually on-site. No external 3 or 5 way is supplied over 30°	
Tie Bars	Tie bars are only required on Victorian roofs with a ridge length exceeding 3000mm	



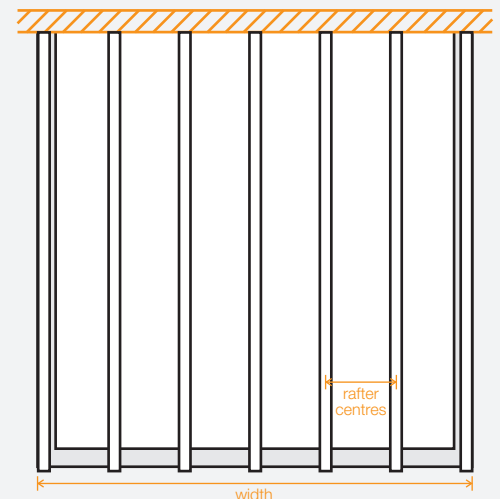
Gable Fronted

Standard Rafter	Max Width	5250mm
Heavy Duty Rafter	Max Width	6000mm
Rafters	Max Centres	635mm
Roof Pitch	Min / Max Angle	15° / 35°
Tie Bars	Tie bars should be positioned on the third rafter from the front. Additional tie bar required on roofs with a ridge length exceeding 2500mm. Tie bars spaced at 2500mm	



Lean-To / Hipped Lean-To

Standard Rafter - EXTRALIGHT	Max Projection	3200mm
Standard Rafter - TAPCO	Max Projection	3000mm
Heavy Duty Rafter - EXTRALIGHT	Max Projection	4200mm
Heavy Duty Rafter - TAPCO	Max Projection	4000mm
Rafters	Max Centres	635mm
Roof Pitch (ExtraLight/Premium/Tapco)	Min / Max Angle	15° / 30°
Roof Pitch (Bonded Tile)	Min / Max Angle	10°



Gallows Brackets / Box Gutter Supports



All box gutters with a length exceeding **3000mm** require support from either a gallows bracket or by means of a supporting brick pier / wall

Eaves / Ring Beam

Openings up to	2400mm	Can be unsupported
Openings between	2401mm and 3600mm	Require an Angle Iron Section of 100mm x 80mm
Openings between	3601mm and 4600mm	Supported by an aluminium box section 100mm x 150mm fixed to the inside of the ring beam.

Structural Posts

Structural posts are designed to be used to provide a means of supporting the roof and transferring the weight directly on to the existing base work. The post is designed to bolt directly to the ring beam and fix down on to the dwarf wall.

The specification can only be determined by the surveyor after taking into consideration the condition of the existing window frames.

The following are recommendations based on a worst case scenario however the addition of walls in the building mean the calculation will need to be done based on window frames.

For building without brick walls the following calculation should be used:

- 1 post for every 6m² for shingle tiles**
- 1 post for every 5m² for slate tiles**
- 1 post for every 4m² for concrete tiles**

Any elevation with a window frame manufactured in one section in excess of **2400mm** in length.

Any elevation with a continuous frame length exceeding **3500mm**

Roof Vents

Roof Vents are available in the following sizes.

- 550mm x 780mm**
- 550mm x 980mm**

Orangeries

Roof lanterns over **3000mm** in length require additional support.

Please contact our technical department for further information.