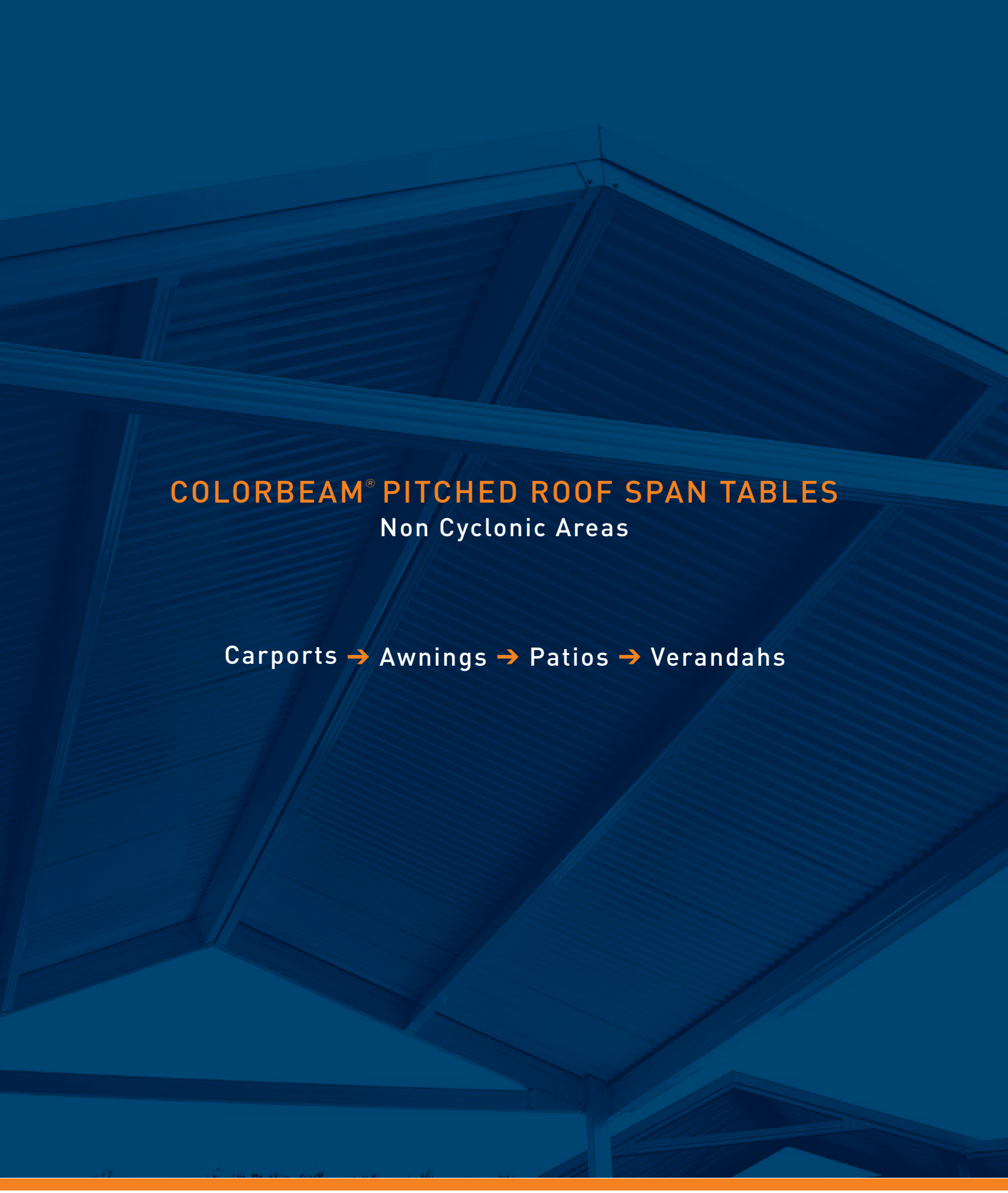

COLORBEAM® PITCHED ROOF SPAN TABLES

Non Cyclonic Areas

Carports → Awnings → Patios → Verandahs

COLORBEAM

FOR HOME IMPROVEMENTS

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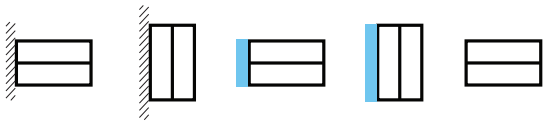
22.5°	**62**
N5 — 15°	**66**
22.5°	**70**

The design of the roof structures in this publication will require the services of a suitably skilled professional consultant with the appropriate expertise and knowledge. **Spantec Systems Pty Ltd** ("Spantec") have prepared these tables to provide guidance to these consultants in the design and specification of the type of structures covered. Spantec accepts no responsibility or liability for misinterpretation and accuracy of the information provided or omissions. Designer or users must satisfy themselves as to the suitability of the design information for their applications.

Spantec is continuously developing and improving the information it presents to the marketplace. It is the user's responsibility to ensure they are referencing the current Spantec information. All current information will be available on the website: www.spantec.com.au

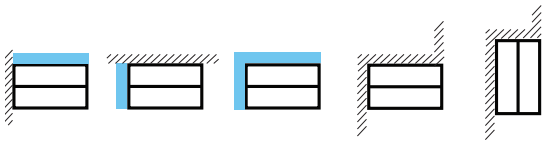
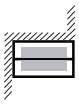
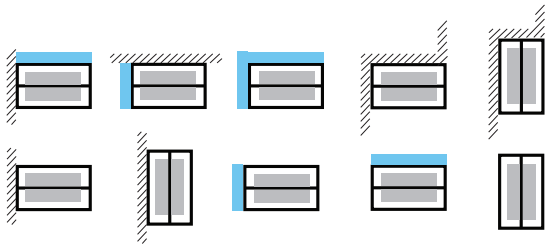
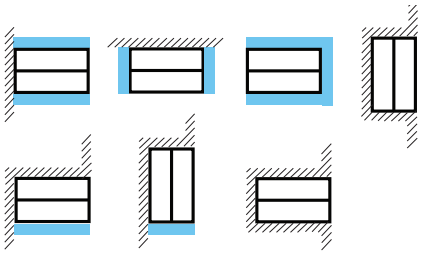
Standard Awning Arrangements

Arrangements for use with values in Standard Awning Span Tables, pages 33 – 73.

Icon	Blocking level	Description	Awning Arrangement
	Empty Under (EU)	• Attached 1 side a & 3 sides open • Free Standing 1 side enclosed & 3 sides open • Free Standing 4 sides open	

Optional Awning Arrangements – for use with reduction factors

Other arrangements require the Standard Awning Span Table values to be reduced with factors. Using the 'Icon', the factors can be determined from the Reduction Factor Table on the relevant span table page.
A sample Reduction Factor Table is shown below.

Icon	Blocking level	Description	Awning Arrangement
	Empty Under (EU)	• Attached 1 side, 1 side enclosed & 2 sides open. • Attached 2 sides & 2 sides open • Free Standing 2 sides enclosed & 2 sides open	
	Fully Blocked (FB)	• Attached 1 side, 1 side enclosed & 2 sides open • Attached 2 sides & 2 sides open • Free Standing 2 sides enclosed & 2 sides open	
	Empty Under (EU) or Fully Blocked (FB)	• Attached 1 side, 2 sides enclosed and 1 side open. • Attached 2 sides, 1 side enclosed & 1 side open • Attached 3 sides & 1 side open • Free Standing 3 sides enclosed & 1 side open	

Legend

 Location of attached side of awning to building

 Enclosed side wall of awning

Awning – plan view

Obstruction (shaded area) beneath the awning controlling the blocking level

Sample Reduction Factor Table

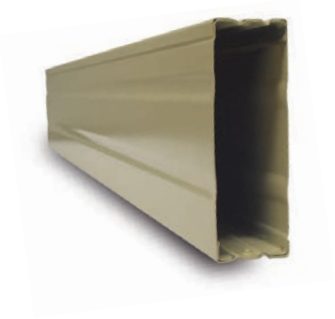
Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.90	0.98	1.00
	0.58	0.78	0.43
	0.45	0.69	0.32

Colorbeam® is a trademark of Spantec Systems Pty Ltd. • COLORBEAM® Pitched Roof Span Tables. PRT-1.2 November 2014

The *Colorbeam® Pitched Roof Span Tables – Non Cyclonic Areas* guide provides detailed product, design and installation information in a flexible format, so that the possible roof configurations are not restricted. The information in this guide can be used for the design of attached or free-standing pitched roof structures, such as a canopy, verandah, patio or carport.

Using this guide with the *Colorbeam® Flat Roof Span Tables* publication, the designer can produce roofs with both pitched and flat profiles.

Colorbeam® is a pre-finished, lightweight, high-tensile steel beam. Colorbeam® structural steel beams are manufactured from two interlocking C-shaped sections, which provide a rectangular profile resembling traditional timber. Unlike timber, the high-tensile steel and hollow section shape produce a strong and long spanning beam, which will not twist or sag with time. Not only does the pre-finish provide a low maintenance finish, the quality finish enhances the look of the roof system.



The bending strength capacity of the Colorbeam® structural steel beams products have been determined through an extensive in-house testing program and FEA modelling by Cardno NSW Pty Ltd.

Examples of Colorbeam® Awning Frames

Attached End Frame

No Web Truss End Frame

Flat & Pitched Roof Combination

Benefits

- **Aesthetics**, has a 'like timber' appearance.
- **Minimal maintenance**, galvanized inside and out with an additional powder coating.
- **Comes in a range of standard lengths**, minimal waste produced.
- **Won't rot, twist or shrink**, steel is a stable, durable product that is not permanently affected by the environment.
- **Straight and true to size**, manufactured to tight tolerances.
- **Termites won't eat it**, will not attract or harbor termites and no on-going chemical treatments required.
- **Light weight**, the efficient use of steel allows a strong beam to be produced from thin steel sheet.
- **Easy to install**, Colorbeam® is a sturdy beam that will not twist during installation and require checking and correction before screw fixing.
- **Non-combustible**, steel is a non-flammable material.

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COLORBEAM
FOR HOME IMPROVEMENTS

Engineering Certification

Spantec Systems Pty. Ltd.
PO Box 81
Mittagong, NSW, 2575

Structural Assessment of Spantec Colorbeam®
Pitched Roof Span Tables

This assessment has been certified by the Spantec Structural Engineer for the structural selection programs and span tables as described in Spantec Systems publication

Colorbeam Pitched Roof Span Tables. – PFT-1.3 October 2015

I consider that these tables comply with the following structural provisions on the National Construction Code of Australia (NCC) 2019:

- Volume One, Structural Provisions - part B1.4
- Volume Two, Steel Framing - Part 3.4.2

The assessment considered the following:

- The design programs to determine the values of beam load width, beam spacing, member span, and connection capacity to calculate the span tables in the publication, comply with generally accepted engineering principles and these following Australian Standards:
  - AS 1170.0:2002 Structural design actions – Part 0: General Principles
  - AS 1170.0:2002 Structural design actions – Part 1: Permanent Imposed and other actions
  - AS 1170.2:2002 Structural design actions – Part 2: Wind Actions
  - AS 4055-2012 Wind Loads for Housing
  - AS 4600:2018 Cold-formed Steel Structures
  - AS 3566.1-2002 Self drilling screws for the building and construction industries – Part 1 General requirements and mechanical properties
  - NASH Standard: 2005 Residential and Low-rise Steel Framing – Part 1: Design criteria
  - AS 1397:2011- Steel Sheet and Strip Hot Dipped Zinc Coated or Aluminum/Zinc coated
- The design capacities of: Bending (**Mb**) Shear (**Vv**) and Bearing (**Rb**) have been determined in accordance with engineering calculations, Laboratory testing and Australian Standard AS 4600 Cold-formed Steel Structures.
- The Ultimate Limit Strength and Serviceability limits of the Colorbeam members have been determined using AS 1170.0, AS 4600 Cold-formed Steel Structures and in-house testing.
- The wind actions for Strength and Serviceability limits have been determined using AS 1170.2:2002 and AS 4055:2012 Wind Load on Housing.

This certification may be considered as "Evidence of Suitability" under the National Construction Code of Australia (NCC), Volume One Clause A2.2 Performance Solutions. Information in the Spantec Systems publication not specifically referenced in this certification is outside the scope of this assessment. This certification does not relieve other parties of their duties and responsibilities. The tables describe many different structures and any specific structure should be fully described with geometry and loading.

The span tables are part of a system which includes the Spantec Colorbeam brackets and fixing.

The system can be considered complete for its intended purpose provide that:

- Connections, fixings and details are in accordance with system specifications, documentation and drawings which must be verified by the certifier
- Supporting structure is stable, able to withstand the wind uplift, beam reactions and separately certified
- The beams are installed in accordance with the designs and professional building standards

Peter J. Barreca *27 Oct 2020*

Civil & Structural Engineer BEng. MIE Aust *CPEng NER* No. 353640

Spantec Systems Pty Ltd

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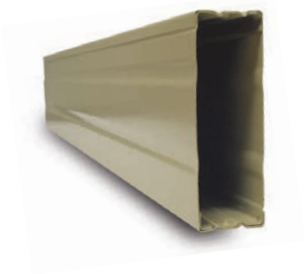
Colorbeam® Pitched Roof Design Notes

1. The builder/owner should ensure the requirements for attached or free-standing roofs outlined by the local authority and government regulations are addressed.
2. The span tables have been prepared for a range of attached and free-standing canopy, awning, verandah, patio and carport roof applications in non-cyclonic wind regions using Colorbeam® structural steel beams and brackets produced by Spantec Systems Pty Ltd.
3. The Design Notes section shall be read in conjunction with *Colorbeam® Pitched Roof Span Tables – Non Cyclonic Areas* publication.
4. Spantec Colorbeam® and connection components, comply with the following Australian Standards:
   - AS 1397:2011 Steel sheet and strip – Hot dipped zinc-coated or aluminium/zinc-coated
   - AS 3566.1:2002 Self drilling screws
5. The testing and design of Colorbeam® and connection components, comply with the following Australian Standards:
   - AS/NZS 1170.0:2011 Structural design actions – Part 0: General principles
   - AS/NZS 1170.1:2002 Structural design actions – Part 1: Permanent imposed and other actions
   - AS/NZS 1170.2:2011 Structural design actions – Part 2: Wind actions
   - AS 4055:2012 Wind loads for housing
   - AS/NZS 4600:2005 Cold-formed steel structures
   - NASH Standard, Residential and Low-rise Steel Framing, Part 1: Design Criteria 2013
6. The connection details shall be in accordance with the details in this publication. Other connections are to be designed and certified by other relevant party (structural engineer).
7. The structural work to determine the span tables in the Spantec publication – *Colorbeam® Pitched Roof Span Tables – Non Cyclonic Areas* has been designed for the following loads:
   - Dead Loads: 0.10kPa (includes the weight of the roof (sheeting & flashings) and Colorbeam® beams only).
   - Live Loads: 0.25kPa (non-trafficable roof). The span tables have NOT considered the 1.4kN maintenance loading and propping and crawl boards are recommended when accessing the roof.
   - Wind Loads: Wind classes in accordance with AS4055:2012 and wind pressures in accordance with AS1170.0:2011 and AS1170.2:2011 for attached and free-standing roofs for performance requirements nominated in the *Colorbeam® Pitched Roof Span Tables – Non Cyclonic Areas* publication.
8. The maximum height of the pitched roof shall be 4.0m in accordance with AS/NZS 1170.2:2011 requirements. Note, this height is equal to the fascia (eaves) height plus ½ the height of the ridge above the fascia (eaves).
9. The pitched roof awning must satisfy the following geometry requirement:
   - $0.25 \leqslant h_C/d \leqslant 1$, where h_C is the height of the awning and d is the plan dimensions of the awning. When the geometry is outside of this range, the designer shall approve the adequacy of the span tables for determining the maximum awning frame spacing and maximum roof member span values.
10. A structural engineer shall design and certify the structural adequacy of the:
    - Existing foundation.
    - New foundation.
    - Connection to the foundation.
    - Connection to the supporting structure.
    - Structural adequacy of the supporting structure to support the roof loads.
11. Proprietary items supplied by others shall be installed in accordance with the manufacturer's specification and instruction.
12. The builder/owner is to ensure that the necessary approvals (certifications) are obtained from a structural engineer or other relevant party.
13. The span tables have been prepared for attached 1 side and free-standing, 4 sides open or 3 sides open/1 enclosed sides pitched roofs that are 'Empty Under' ($\leqslant$ 50% blocking) in accordance with AS/NZS 1170.2:2011 requirements. For other awning arrangements, use the 'Awning Selection Tables' section to determine type and reduction factor.
14. Installation: Spantec Systems Pty Ltd recommends propping the Colorbeam® members during the installation of sheeting, and the use of crawl boards over the sheeting (see, sheeting manufacturer's recommendations).
15. Durability, the designer shall ensure that the Colorbeam® protective coating (Z275) is adequate for the design location. In coastal locations, the roof can be exposed to corrosive environment. For maintenance purposes, Spantec recommends the owner wash down the structure, especially locations where salt or debris can deposit – such as joints.

Colorbeam® is a trademark of Spantec Systems Pty Ltd.

Colorbeam®

Colorbeam® structural steel beam is a cold formed structural 'box-section' manufactured from two high tensile zinc coated 'C'– sections which are fixed together by HENROB® rivets on the top and bottom flanges to form a rigid rectangular hollow section. The brackets are fabricated from zinc coated steel sheet. Both the beams and brackets are powder coated.



The standard Colorbeam® members are supplied in 3 depths and various stock lengths.

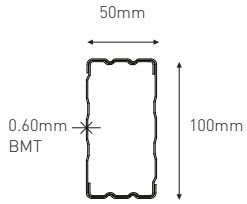
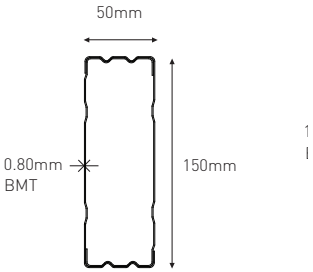
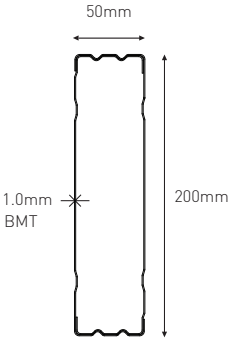
Identification

Colorbeam® members are identified by the marking system as follows.

Product Description (Colorbeam:CB)	Depth of section (mm)	Material Gauge Total thickness of metal at the Flange. 2 x Base Metal Thickness (BMT) x 10
CB	100	12

Dimensions

The dimensions and mass of Colorbeam® members are shown in the tables that follow.

Colorbeam Section		
CB100-12	CB150-16	CB200-20
		

Colorbeam Section	Dimensions D x W (mm)	Base Material Thickness, BMT (mm)	Mass (kg/m)
CB100-12	100 x 50	0.60	2.13
CB150-16	150 x 50	0.80	3.46
CB200-20	200 x 50	1.00	5.10

Availability

Colorbeam® is rolled to stock lengths, see table below. Contact your supplier to confirm the in-store availability.

Colorbeam Section	Stock Lengths (m)									
CB100-12	4.0m	4.5m	5.0m	5.5m	6.0m	6.5m	7.0m	7.5m	8.0m	9.0m
CB150-16	4.0m	4.5m	5.0m	5.5m	6.0m	6.5m	7.0m	7.5m	8.0m	9.0m
CB200-20	4.0m		5.0m		6.0m		7.0m		8.0m	9.0m

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Material Specification

Colorbeam® structural steel beams are made from zinc coated high tensile grade G550 steel complying with the AS 1397:2011 (AS1397/G550 Z275). Base metal thicknesses (BMT) of the products are: 0.60mm; 0.80mm and 1.00mm.

Coating Specification

Colorbeam® is rolled from sheet metal with zinc coating of Z275. The Z275 coating relates to a minimum zinc coating of 275g/m^2 in accordance with AS 1397:2011 (g/m^2 = grams of zinc per m^2).

The finish coating of the beams is a powder coating. This coating is applied for aesthetics and should not be relied upon for durability. Colorbeam® is available with a galvanized and selected powder coated finishes. Should the beams require a higher coating class; a finish coating to meet the project specification can be applied to the galvanized Colorbeam® product.

The Building Code of Australia provides guidance on the minimum coating class required for cold-formed steel members with regards to the surrounding environmental conditions (i.e., industrial or coastal). The designer shall approve the adequacy of the coating for the intended use of Colorbeam®.

Manufacturing Tolerances

The tolerances Colorbeam® members are within the manufacturing tolerance requirements outlined in Appendix D of the NASH Standard, Residential and Low-rise Steel Framing, Part 1: Design Criteria 2013.

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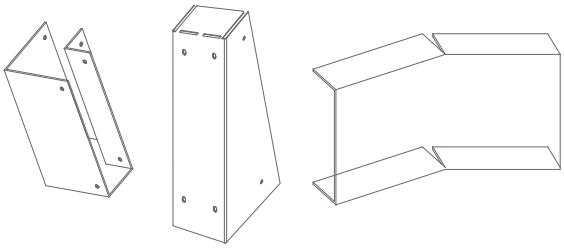
Brackets

Spantec produce a range of brackets that allow the various roofing configurations to be assembled. The arrangement of the brackets are outlined in the 'Connections Details' section.

The brackets are supplied to suit the 3 Colorbeam® depths and a range of roof pitches.



Availability

The brackets are available in the colours that match the Colorbeam® members. Contact your supplier to confirm the in-store availability.

Material Specification

The majority of Spantec bracket products are made from zinc coated grade G2 steel complying with AS 1397:2011 (AS1397/G2 Z275) and AS/NZS 1365:1996. The base metal thickness (BMT) is: 1.15mm for all brackets, except the Collar Tie Bracket BMT which is 1.55mm and the Apex Bracket BMT which is 2.95mm.

Coating Specification

The brackets are rolled from sheet metal with the zinc coating of Z275. The Z275 coating relates to a minimum zinc coating of 275g/m^2 in accordance with AS 1397:2011 (275 grams of zinc per m^2).

The Building Code of Australia provides guidance on the minimum coating class required for cold-formed steel members with regards to the surrounding environmental conditions (i.e., industrial or coastal). The designer shall approve the adequacy of the coating for the intended use of Colorbeam®.

Fasteners

Spantec supply a range of fasteners for bracket fixing and fixing to structural steel. The class of finish on the screws shall comply with requirements of AS 3566:2002 or other applicable standard. The fastener type and quantity required for the connection type are shown in a table with the connection detail.

The screws in the Connection Details section are the minimum size for the quantity shown. A larger screw size with the same head type may be substituted.

Description	Screw Type	Nominal Screw Diamter, 'd_f' (mm)	Application	Class of Finish
12-14x20mm Hex Head self drilling screw (Tek screw)	No. 12	5.40	To connect brackets to Colorbeam®	Class 3 (AS 3566)
10-16x16mm Wafer Head self drilling screw (Tek screw)	No. 10	4.80		
12-24x20mm Hex Head self drilling screw (3-5mm thickness)	No. 12	5.40	To connect brackets to structural steel	Class 3 (AS 3566)
12-24x32mm Hex Head self drilling screw (4-10mm thickness)	No. 12	5.40		
12-14x75mm Hex Head self drilling screw (Tek screw)	No. 12	5.40	Long fixing screws to laminate beams and to fix to brackets from one side only.	Class 3 (AS 3566)

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Wind loading for strength or serviceability (deflection) provides the governing criteria when determining the maximum spacing of the awning frame and span of the roof member.

The designer requires the 'wind classification' of the site for the selection of the appropriate roof framing member arrangement. The wind classifications correspond to those determined in accordance with AS4055. If the site conditions differ from those in AS4055 then obtain the serviceability and ultimate wind speeds from the designer. Use the table below to determine the wind classification in this publication for the site wind speed. The wind classification shall have a limiting wind speed greater than the site wind speed for the project. Should the designer determine the wind speed to be higher for the wind classification, then the designer can nominate the appropriate wind classification in this guide.

Wind Class

Wind classifications were originally based on the permissible stress 'W' classes. For limit states design approach and non-cyclonic areas, the classes are denoted by 'N'. The relationship between 'N' and 'W' is shown in the table below.

Design Gust Wind Speed

The design gust wind speeds for the various wind classifications in this publication are shown below.

Generally, the awning roof at the site is not the same geometry as the surrounding buildings, and not the same type of structure as a residential building. Therefore a different set of parameters are adopted for an awning roof. Similar to the calculations in AS4055, the design gust wind speeds were determined for various combinations of the parameters (regional wind speed, and directional, terrain category, shielding, and topography multipliers). The design gust wind speed for the wind class was determined by selecting the maximum wind speed with a margin allowance, that occurred in the sets of combinations nominated with the same wind classification in AS4055 (N2, N3, N4, N5).

For the awning pitched roofs, the following parameters were adopted:

- Importance = 2
- 25 years design life
- Ultimate Limit State Annual Probability of Exceedance = 1/250
- Serviceability Limit State Annual Probability of Exceedance = 1/2
  (this value generated serviceability design gust wind speeds similar to those in AS4055)
- Roof height, h_c = 4.0m
- Building height, h = 6.5m
- Fully shielded multiplier = 0.90; Partially shielded = 0.95; No shielding = 1.0
- Directional multiplier, M_d = 0.95 (Region A & Region B)
- Margin 5% adopted for determining the design gust wind speeds

Wind Classification and Design Gust Wind Speeds for Colorbeam® Pitched Roof Span Tables.

Wind Classification	Design Gust Wind Speed (m/s)	
Regions A & B (Non-Cyclonic)	Serviceability Limit State (SLS), V_s	Ultimate Limit State* (ULS), V_u
N1 (W28)	26	33
N2 (W33)	28	42
N3 (W41)	32	49
N4 (W50)	39	59
N5 (W60)	47	71
N6 (W70)	55	79

Note: * AS1170.2:2011 Clause 2.3 – the minimum ultimate limit state gust design wind speed is 30m/s.

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Design Wind Loads

In determining the design wind loads to apply to Colorbeam® structural steel beams the following assumptions were made regarding the roof structure:

- The roofs are applicable to structures described as, canopies, patio, awnings and carports.
- The roofs are located in non-cyclonic areas.
- 'Empty Under' roofs have blocking less than 50%, and 'Fully Blocked' have blocking greater than 75%.
- 'Enclosed' roofs are those with at least 1 or more sides enclosed with a wall.
- Wind load is acting perpendicular to the roof sheeting surface.

When selecting the roof sheeting type and maximum spans as a function of wind classification and fixing arrangement (single span or continuous span), the designer must check that the maximum pressure limits for the Colorbeam®, roof sheeting, and other materials resisting wind pressure exceed the design wind pressures for the project. Following are the maximum wind pressures used to determine the various awning frame span and roof member spacing, in the span tables.

The design wind pressures for roof slopes of 15º/22.5º for the following pitched roofs are:

- Attached 1 side, 'Empty Under' blocking level
- Freestanding 4 sides open, 'Empty Under' blocking level, or
- Freestanding 3 sides open / 1 side enclosed, 'Empty Under' blocking level.

Wind Classification (Regions A & B) (Non-Cyclonic)	Attached Pitched Roof – Design Wind Pressure (kPa)			
	Serviceability Limit State		Ultimate Limit State	
	Upward	Downward	Upward	Downward
N2 (W33)	0.21 / 0.28	0.21 / 0.29	0.48 / 0.64	0.48 / 0.65
W36	0.25 / 0.33	0.25 / 0.34	0.56 / 0.75	0.56 / 0.76
N3 (W41)	0.28 / 0.37	0.28 / 0.37	0.65 / 0.87	0.65 / 0.88
N4 (W50)	0.41 / 0.55	0.41 / 0.56	0.94 / 1.26	0.94 / 1.27
N5 (W60)	0.60 / 0.80	0.60 / 0.81	1.36 / 1.82	1.36 / 1.85

Generally an increase in the blocking level and/or the enclosure of 1 or more open sides of the roof will increase the wind pressures acting on the roof and reduce the span and/or spacing capability of the awning frame/s and roof members, possibly the connection loads to the existing structure, posts and foundations.

Awning Geometry Limitations

The Australian Standard AS/NZS 1170.2:2011 method for determining the wind pressures has limitations on the awning geometry for which the methods are applicable. Should your awning geometry be outside these limitations, contact an appropriate professional for advice on the span table suitability.

Free standing or 1 side attached

For an awning with no enclosed walls blocking the wind flow (attached 1 side or free standing with 4 sides open or 1 side enclosed), the geometry must satisfy the following geometrical requirement:

- $0.25 \nwarrow h_c/d_l \nwarrow 1$

The awning depth limits (d_l) are measured in the direction of the wind flow. The table below provides the lower and upper bounds of an awning depth for an eaves height (h_e) of 2400mm. For additional eaves height (h_i), increase the minimum awning depth (d_l min.) by the additional eaves height (hi) and the maximum awning depth (d_l max.) by 4 times the additional eaves height (4 x h_i). For h_e of 2600mm, the additional eaves height (h_i) is 200mm.

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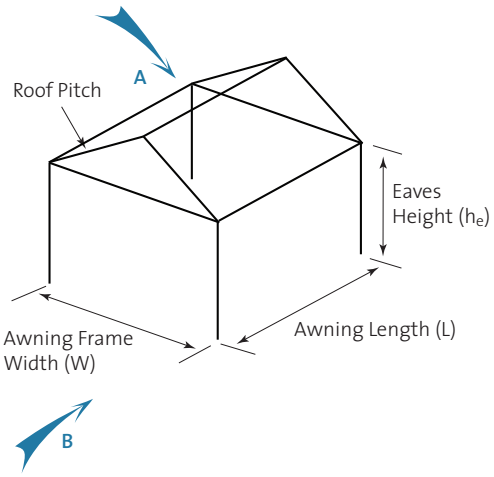
Awning Geometry Limitations

The awning depth to compare to the depth limits (d_l) would be the following:

- Wind from the direction "A" then d is W value, and
- Wind from the direction "B" then d is L value (on drawing).

W	Awning Depth Limits, d_l (mm)			
	Roof Slope			
	15°		22.5°	
	$d_{l\ min.}$	$d_{l\ max.}$	$d_{l\ min.}$	$d_{l\ max.}$
1500	2500	10002	2555	10221
1800	2521	10082	2586	10346
2100	2541	10163	2617	10470
2400	2561	10243	2649	10594
2700	2581	10323	2680	10718
3000	2601	10404	2711	10843
3300	2621	10484	2742	10967
3600	2641	10565	2773	11091
3900	2661	10645	2804	11215
4200	2681	10725	2835	11340
4500	2701	10806	2866	11464
4800	2722	10886	2897	11588
5100	2742	10967	2928	11712
5400	2762	11047	2959	11837
5700	2782	11127	2990	11961
6000	2802	11208	3021	12085
6300	2822	11288	3052	12210
6600	2842	11368	3083	12334
6900	2862	11449	3115	12458
7200	2882	11529	3146	12582
7500	2902	11610	3177	12707
7800	2923	11690	3208	12831
8100	2943	11770	3239	12955
8400	2963	11851	3270	13079
8700	2983	11931	3301	13204
9000	3003	12012	3332	13328

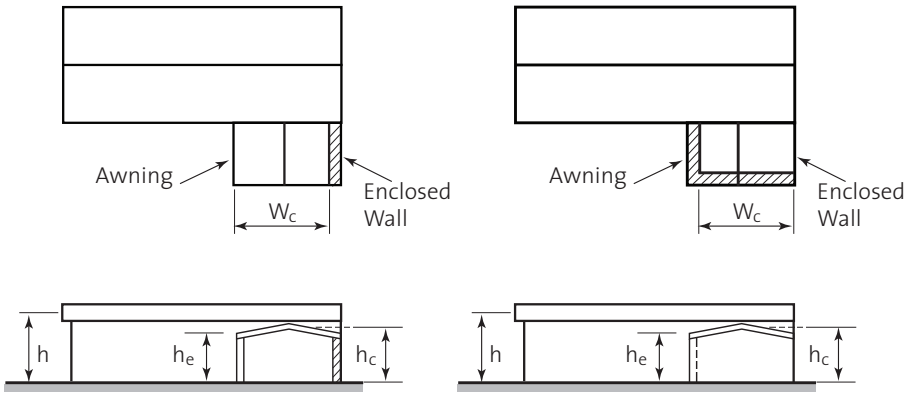


Note: Values can be linearly interpolated. Values determined for an eaves height (h_e) of 2400mm.

Attached With More Than 1 Side Attached or Enclosed

For awnings that have more than 1 side attached or enclosed (see diagram below), the geometry limits are:

- $h_c/h \leftarrow 0.8$, is satisfied by the assumptions in this document (h = 6.5m).
- $h_c/w_c \nwarrow 0.5$, the width, w_c must be greater than twice the awning height (h_c). The awning height (h_c) is equal to the minimum depth limit (d_l) in the table above.



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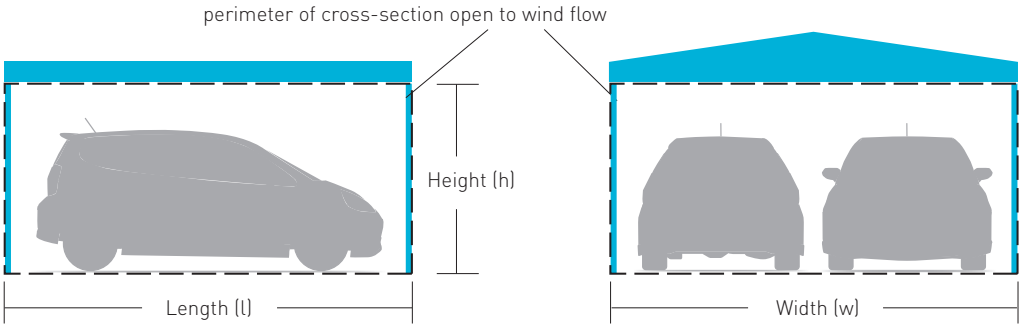
Blocking of Cross-Section Exposed to Wind

When goods or materials are stored beneath an awning, or a wall partially or fully encloses a cross-section, this obstruction to the flow of wind beneath the awning can result in an increase in wind pressure on the roof. The designer must consider the likely level of blocking and/or enclosure of the cross-section.

The values in the span tables have been determined for awnings with an 'Empty Under' blocking level. 'Empty Under' implies the goods or materials stored beneath the awning block less than 50% of the cross-section exposed to the wind. To determine the span or spacing values for the 'Fully Blocked' case (greater than 75% of the cross-section exposed to wind is blocked) and/or sides are enclosed, then a Reduction Factor is applied to the span table values, which generally reduces the values.



Open area for wind flow (⊏⊐⊐) = (h x l, h x w) = $A_{opening}$
Area of obstruction under the awning blocking wind flow ( ) = $A_{blocking}$
Blocking Level Percentage = $A_{blocking}$ / $A_{opening}$ x 100%

Frictional Drag and Drag on Exposed Members

The loading due to frictional drag on both the upper and lower surfaces of the roof and/or drag on exposed members has not been considered in the design of the bracing (columns) and connection to an existing structure. These loads will need to be considered by the structural engineer when designing the post type and foundation for the roof structure, as well as the connection of the brackets to the existing building for an attached roof structure.

Local Pressure Factor for Wind Loading

For members that support the sheeting – such as the purlins, and fascia and ridge beams - local pressure factors of 1.04 and 1.19 respectively have been applied to the design wind pressure. Note: these pressures are applied over localized areas – see AS/NZS1170.2:2011 – so an equivalent load approach has been used to rationalize the local loading to an equivalent uniformly distributed load (UDL) for the ultimate limit state design.

Design Criteria

Serviceability Limit State (SLS)

To satisfy the serviceability limit state (SLS) criteria, the deflection of the frame is restricted by the following limits for the load combination, as shown below.

Description	Load Combination	
Dead load, G	G	
Serviceability wind load, Ws	W_S	

Ultimate Strength Limit State (ULS)

The ultimate limit state determined the maximum span of the Colorbeam® beam at the collapse condition, based on the Colorbeam® design capacities and connection capacities determined in accordance with AS/NZS 4600:2005 and the load combinations in accordance with AS 1170.0:2011.

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Safety

OH&S

Colorbeam® structural steel beams are supplied in stock lengths and will require cutting on-site with power equipment. This process can produce fine metal particles and the user must ensure they are wearing the appropriate personal protective equipment (PPE), as a guide:

- Eye protection – suggest full face protection mask.
- Hearing protection.
- Handling protection (gloves) – handling before any sharp edges removed.
- Suitable clothing (long shirts) – avoid skin irritation.

The PPE requirements should be determined by the installers prior to starting a project.

Storage and Handling

Keep Colorbeam® dry and clear of the ground. If pack becomes wet, separate the beams, wipe them with a cloth, and restack so they will dry thoroughly. Handle material carefully. Painted surfaces will scratch if tools or other beams are dragged over them.

Cutting

The best way to cut Colorbeam® is with a cold cutting circular saw, such as the Makita Model 4130. Alternatively, a conventional circular saw with a metal cutting friction blade may be used, but more care needs to be taken to ensure that the hot particles do not strike the Colorbeam® surface. Ensure that all swarf is removed by the end of the day to ensure that rust stains do not affect construction surface.

Design Considerations

Design by a Structural Engineer

A structural engineer will be required to provide the design of the following:

- Design of the columns for the free-standing roof structures to resist the lateral loads due to wind loading.
- Connection of the columns/posts to the foundation.
- Design of the foundation or adequacy of an existing foundation (slab edge) to resist the uplift and over-turning loads applied to the column.
- Design of the fixing for the connection bracket to the support structure, and verification of the structural adequacy and strengthening – as required – of the supporting structure.
- Advice on the coating adequacy for the environment conditions.

Note: The connection of the roof framing to the posts is considered a 'pin' connection.

Attached Roofs – Connection to Building

The design and approval of the connection of the bracket to the supporting structure and the verification of the adequacy of the supporting structure is the responsibility of the structural engineer. For attached roofs that extend away from the building in both directions, the frame and column section beyond the building shall be designed as a free-standing roof – the columns and foundations will need to resist the lateral forces on the roof.

Free Standing Roofs – Proximity to Existing Structures

It may be prudent for the designer to consider a wall enclosed or 'Fully Blocked', if the edge of the free standing roof is located within 500mm of the roof perimeter of an adjacent building or a fence (or similar structure) which is higher than the awning roof. As the structure (building, fence) beyond the awning roof may restrict the flow of wind through the otherwise 'Unenclosed' roof structure.

Selection of Roof Sheeting

This guide provides span tables for a roof slope of less than or equal to 22.5°. Use the roof sheeting supplier's literature to confirm the sheeting is adequate for the chosen application (end span length for short spanning and clear span length for long spanning) and the slope of the roof. The purlins shall be equally spaced.

IMPORTANT: Contact the roof sheeting manufacturer for advice on the required fastener type and quantity for securing the sheeting to Colorbeam®.

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Roof Bracing

The horizontal wind loads acting on an awning will be transferred to the posts and/or attached to another structure by bracing. Due to the large range of awning configurations, the design of bracing is beyond the scope of this publication. Forms of bracing include the roof sheeting and strap bracing. Design advice should be available from the designer or roof sheeting manufacturer.

Aggressive & Corrosive Environments

Products exposed to coastal environments (within 1km of a surf coast) and heavy industrial areas may require an additional protective coating to extend the products service life. For further information please refer to the BCA 2014, Volume 2 Part 3.4.2.

If this product is to be used in unusually corrosive environments, such as marine or severe industrial environments, seek advice from an appropriate engineer. The severity of the environment is influenced by a number of factors, such as breaking surf, distance from the surf, topography, vegetation and the direction of prevailing winds.

For maintenance purposes, Spantec recommends the owner wash down the structure, especially locations where salt or debris can deposit – such as joints.

Compatibility of other materials

Colorbeam® structural steel beams should not be used in direct contact with green timber or some timbers treated chemically, such as with copper arsenates. Colorbeam® should not be used in contact with bare steel as the zinc coating could be consumed by the corrosion of the steel. Also do not use in contact with lead or copper or water run-off from these metals.

Installation Considerations

Bracket Connections

The Colorbeam® pitched roof building solutions have a comprehensive range of brackets to allow the roof framing to be fabricated. In designing these brackets care has been taken to maintain the clean lines of Colorbeam® and to allow for construction tolerances.

The brackets are provided with a minimum number of screw holes. Additional screws shall be spaced evenly between these hole locations. It is not necessary for the bracket to be pre-drilled, but the installer may pre-drill or mark the bracket so that the screws are set-out neatly. The minimum edge distance and spacing of screws shall satisfy the minimum requirements in accordance with AS/NZS4600:2005.

Solvents and Acids

Care should be taken to keep solvents and acids (such as brick cleaning acids) away from painted or galvanised finish of steel products.

Plastic Protective Film

Some Colorbeam® members are supplied with a plastic film. This should be removed at the time of installation.

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Step 1 Obtain the local authority requirements

- Maximum height and plan size of roof, guidelines on roof location relative to other buildings.
- Submission documents – authority checklist, engineer's certification, manufacturer's literature.

Step 2 The owner has to make decisions regarding the selection of roof style

- Location and type of roof (attached or free-standing or proximity to other structures), size of covered roof area (L & W).
- Wind classification or design gust wind speed: N1, N2, N3, N4, or N5 (see local authority or project engineer).
- What is the blocking level (≤50% is 'Empty Under' and ≥75% is 'Fully Blocked')?
- Are there any unattached walls 'enclosed'? If so, how many?
- Aesthetics –
  - → Style of end frames and internal frames, as required.
  - → Roof Sheeting Type and Maximum Sheeting Span (match existing, clear span from fascia to ridge).
  - → Roof Slope (match existing, direction of fall).
  - → Framing arrangement (purlins for traditional verandah style, roof sheeting gable end overhang, slender framing members, or deep, expressive fascia beams).
  - → Post/Column location (views from house, position between windows, internal posts acceptable).
- Location of roof relative to the building (attached to building or free-standing structure, attached classification for a free-standing roof within 500mm of existing structure, such as a high fence or neighbouring building).
- Position of roof relative to existing structures, such as planter boxes, BBQ and water features, for access to fixing points.

Step 3 Determine the roof framing layout

- Roof Geometry Check – determine if the roof dimensions satisfy the wind loading design requirements.
- For the roof sheeting type –
  - → Determine a Maximum Intermediate Purlin Spacing (No purlin, 1200mm, 1800mm, or 2400mm), such that the Actual Intermediate Purlin Spacing (PS) ↖ Maximum Sheeting Span.
  - → Refer to appropriate span tables for the approximate Maximum Intermediate Purlin Spacing and the required number of intermediate purlins.
  - → Determine the Maximum Awning Frame Load Width (LW) permitted for the awning frame for the selected Design Intermediate Purlin Spacing (No purlin, 1200mm, 1800mm or 2400mm).
- Select a preferred end frame and internal awning frame type.
- Determine the Maximum Allowable Roof Beam Spans (FB, X, FBO, P).
  - → Does post location conflict with existing structures?
- For pitched roof types – refer 'Awning Selection Tables' section – determine the reduction factor and apply to load width and span values. Check the selected beam size is adequate.

Step 4 Determine the size of the Colorbeam® members

- Review optional member sizes for the framing members, such as smaller purlins.
- The purlins must be equally spaced along the length of the supporting top chord/rafter.

Step 5 Structural engineer to design and certify connections and foundations

- Attached Roof –
  - → Structural engineer to design the connection of bracket to supporting structure and confirm adequacy of structure, and confirm adequacy of existing foundation or provide new design.
- Free-Standing Roof –
  - → Structural engineer to design the post size, and connections and foundations at the base of the posts, and confirm adequacy of existing foundation or provide new design.

Step 6 Builder/owner to prepare submission to local authority

- Submission documents – authority checklist, engineer's certification, manufacturer's literature.

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Wind classification and Roof Pitch

COLORBEAM

Standard Awning Span Tables N2 (W33) 15°

Roof Sheeting & Purlin information.

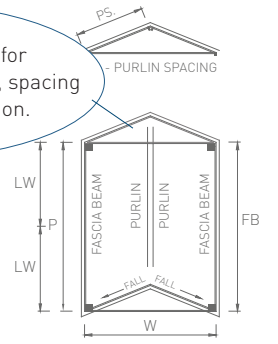
Roof Sheet - Long Spanning
No Intermediate Purlins

Maximum Load Width of Frames

Maximum Allowable Awning Frame Load Width, LW (

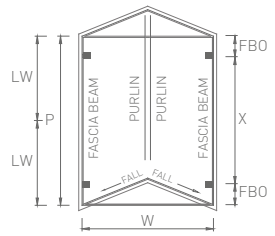
W	Rafter Frame			Collar Tie Frame			No Wel					
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-				
		15000	15000	13417	15000	15000	15000	15000				
			15000	10283	15000	15000	15000	15000	15000			
			15000	8098	15000	15000	15000	15000	15000	15000	15000	15000
			15000	6524	12702	15000	15000	15000	15000	15000	15000	15000
			13040	5356	10680	15000	11870	15000	15000	11954	15000	15000
		7060	11170	4470	9106	13462	9549	15000	15000	9617	15000	15000
3300	2700	5990	9650	3782	7863	11846	7790	13042	15000	7848	15000	15000
3600	2270	5130	8410	3238	6850	10595	6176	10085	14675	6445	13405	15000
3900	1960	4440	7390	2801	6016	9376	4929	8040	11699	5315	10974	15000
4200	1700	3860	6550	2446	5320	8417	4009	6533	9506	4517	9259	15000
4500	1390	3370	5840	2152	4735	7595	3282	5341	7772	3848	7821	13097
4800		2970	5230	1908	4238	6885	2769	4501	6550	3275	6589	11040
5100		2630	4720	1702	3813	6267	2334	3768	5594	2853	5705	9590
		2340	4270	1527	3448	5726	1982	3132	4973	2496	4958	8359
		2100	3880	1378	3131	5251	1728	2702	4318	2181	4302	7270
			3540	1249	2855	4831	1527	2382	3680	1931	3783	6418
			3250	1138	2613	4458	1454	2128	3192	1723	3350	5711
			2980	1040	2399	4124	1388	1906	2770	1536	2963	5074
			2740		2210	3677		1718	2423		2643	4530
			2530		2010	3229		1535	2134		2386	4075
7500			2330		1747	2816		1359	1881		2152	3661
7800			2160			2554			1677			3295
8100			2000			2312			1495			3002
8400			1850			2088			1340			2732
8700			1710			1878			1207			2483
9000			1550			1683			1087			2286

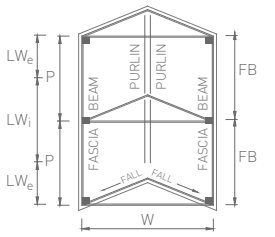
Layout of roof members for various awning arrangements, spacing and beam span information.



Frame Legend
Provides the frame type reference and frame type Colorbeam sizes.

For a **'W'** value determine the maximum awning frame load width **(LW)** for various Colorbeam sizes and frame types.





Maximum Span of Roof Beams

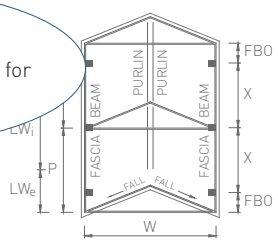
Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Purlin Details: Max. Purlin Spacing (mm)	Purlin Details: Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20		
1500	6000	9000	12000	3968	5991	8239	6000	900			
1800	6000	9000	12000	3732	5632	7745	6000				
2100	5903	8912	11965	3542	5347	7351	5903				
2400	5646	8524	11572	3387	5113	7026	5646	85			
2700	5429	8195	11179	3256	4914	6754	5429	8195			
3000	5241	7913	10742	3140	4743	6520	5241	7913	10742		
3300	5077	7665	10356	3043	4594	6314	5077	7665	10356	1708	
3600	4932	7446	10012	2954	4462	6132	4932	7446	10012	1863	
3900	4802	7250	9702	2877	4342	5970	4802	7250	9702	2019	
4200	4685	7073	9420	2806	4237	5824	4685	7073	9420	2174	
4500	4579	6912	9164	2744	4142	5692	4579	6912	9164	2329	
4800	4481	6765	8928	2685	4052	5569	4481	6765	8928	2485	
5100	4391	6630	8711	2630	3973	5458	4391	6630	8711	2640	
		6504	8510	2583	3897	5356	4309	6504			
			8323	2536	3829	5260	4232	6332			
				2493	3764	5172	4160	617			
				2452	3703	5088	4093	6024			
				2417	3649	5011	4030	5897			
					3595	4937	3941	5779	7686	3572	
		7550			3531	4870	3858	5668	7550	3727	
7500	3780	5564	7413		3451	4804	3780	5564	7413	3882	
7800	3707	5456	7279			4742	3707	5456	7279	4038	
8100	3638	5354	7152			4642	3638	5354	7152	4193	
8400	3572	5257	7032			4549	3572	5257	7032	4348	
8700	3510	5166	6918			4453	3510	5166	6918	4503	
9000	3451	5079	6809			4370	3451	5079	6809	4659	
FBO				700	1050	1400					

Intermediate Purlins

Roof Beam Legend
Provides name and reference for various members.

For a **'W'** value determine the maximum roof beam span for various Colorbeam sizes and beam types.



Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.98	0.93	1.00
	0.59	0.70	0.79
	0.41	0.58	0.59

Factors for reducing values in span tables

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate [illegible] along the top chord (rafter).

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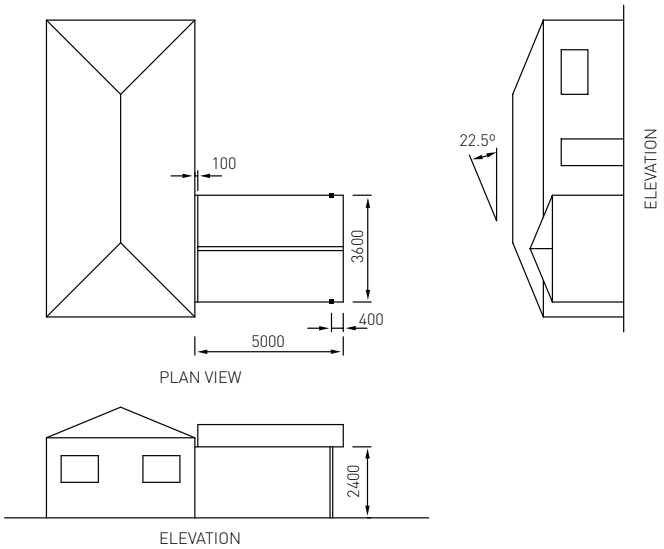
Additional information relating to the tables

Worked Example 1: Attached Single Carport

Requirements:

The attached carport is fixed on one side to the existing house. It shall cover an area of 3600mm wide x 5000mm long and the frames will run across the width of the roof. The eaves height of the awning is 2400mm. The roof sheeting will have no gable or fascia beam overhang and will be long spanning roof sheet clear span from the fascia (eaves) beam to the double purlin (apex). The roof sheeting has a maximum single span = 2020mm. The end frames will be a "King Post Truss" with no infill. The awning roof is attached to the building's eaves and the end frame will be 100mm from the fascia board. The posts will be set back 400mm at the other end. The slope of the roof is 22.5 degrees to match the building. No walls are enclosed and the structure is to be considered 'Empty Under' (blocking level ← 50% of the cross-section is obstructed).



The region for the project has a wind classification of N2 in accordance with AS 4055:2012.

Need to Determine:

King Post Truss member sizes
Adequacy of sheeting and intermediate purlin requirement
Fascia beam size
Apex purlin size

Important

The design and certification of the following items is required by others:

- Existing and/or new foundations.
- Column (post) size and connection to the foundation.
- Connection bracket to the existing support structure (building).
- Approval of the structural adequacy or strengthening requirements of the existing structure to support the attached pitched roof.

Solution:

Input Variables

Covered Area Width	= 3600mm
Covered Area Length	= 5000mm
Gable End Roof Sheeting Overhang, RO	= 0mm

Span Table Parameters

Width of Awning Frame, W =	3600	= 3600mm
Column spacing, X =	5000 – 400	= 4600mm
Frame spacing, R =	5000 – 100	= 4900mm
Awning Frame Load Width, LW =	4900/2	= 2450mm
Fascia beam overhang, FBO		= 400mm

Roof Geometry Check – Applicability of Colorbeam® Pitched Roof Span Tables

For an eaves height (h_e) of 2400mm, an awning frame width (W) of 3600mm and roof slope of 22.5° degrees, geometry limits (refer page 12) are:

$d_{l\ min.}$ = 2773mm ← d = W = 3600mm ... OK
$d_{l\ max.}$ = 11091mm → d = W = 3600mm ... OK

The span tables in this publication can be used to design the awning.

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Roof Sheeting Design

Roof Slope, ϕ = 22.5° ... OK
N2 wind classification
Maximum single sheet span = 2020mm (edge of roof within 1200mm of corner, $k_l = 2$)

Maximum distance between fascia beam and apex purlin, refer to span table on page 37 = 1948mm ↖ 2020mm ... OK
The roof sheeting is adequate for the project, as a long spanning roof sheet.

Awning Frame & Roof Member Design

Adequacy of Wind Loading

- Wind classification N2

  NOTE: Designer to confirm the adequacy the wind loading parameters used to determine wind pressures in the *Colorbeam® Pitched Roof Span Tables – Non Cyclonic Areas*, OR

  If wind classification not known, determine a Colorbeam® Pitched Roof wind classification, such that the project pressures are less than the design pressures used in this publication (see section 'Wind Loading').

- 'Empty Under' blocking level
- 3 sides open – no enclosed walls, except 1 side attached

Awning Frame Design

Refer to Long Spanning roof sheet, No Intermediate Purlins on page 37.

For W = 3600mm, the maximum awning frame load width for a 'King Post Truss' fabricated from the following Colorbeam® member sizes are:

CB100-12: LW = 5,397mm ↗ 2450mm OK
CB150-16: LW = 11,427mm ↗ 2450mm OK
CB200-20: LW = 15,000mm ↗ 2450mm OK

The minimum Colorbeam® size is CB100-12.

Roof Member Design

Refer to Long Spanning roof sheet, No Intermediate Purlins on page 37.

For W = 3600mm, the maximum fascia beam (fascia beam overhang, so min of: FB & X), fascia beam overhang (FBO) and purlin (P) spans for the following Colorbeam® member sizes are:

Colorbeam Type	Fascia Beam (min of: FB & X)		Fascia Beam Overhang (FBO)		Purlin (P)	
CB100-12	2777mm ↖ 4600mm	FAIL	700mm ↗ 400mm	OK	4552mm ↖ 4900mm	FAIL
CB150-16	4194mm ↖ 4600mm	FAIL	1050mm ↗ 400mm	OK	6872mm ↗ 4900mm	OK
CB200-20	5762mm ↗ 4600mm	OK	1400mm ↗ 400mm	OK	8960mm ↗ 4900mm	OK

Although the FBO allows a smaller member than FB, the minimum of FB and X will govern. The designer will have to adopt a CB200-20 Colorbeam® for the fascia beams and a CB150-16 Colorbeam® for the apex purlins.

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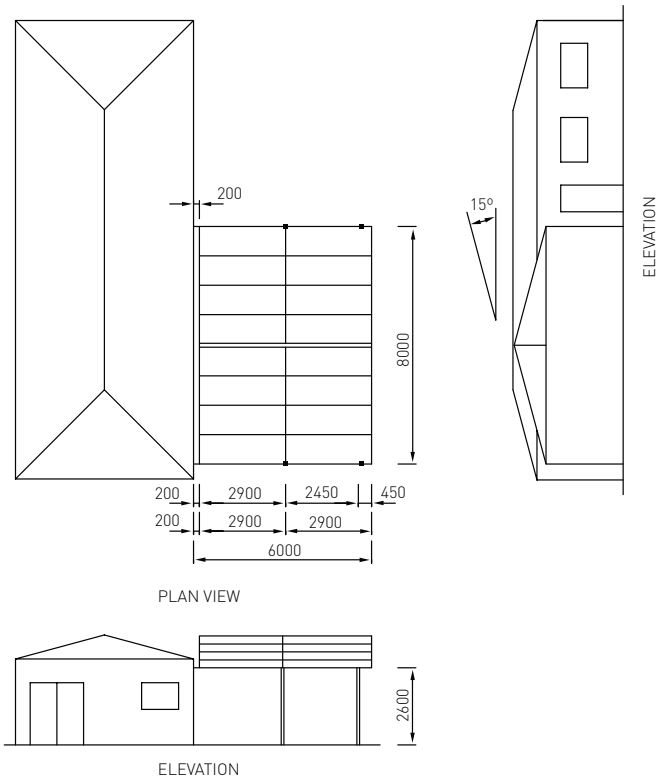
Worked Example 2:
Attached Double Bay Carport

Requirements:

The attached carport is fixed on one side to the existing house. It shall cover an area of 8000mm wide x 6000mm long and the frames will run across the width of the roof. The eaves height of the awning is 2600mm. The roof sheeting will have no gable or fascia beam overhang and will be short spanning roof sheet (span from the fascia (eaves) beam to the intermediate purlin to the double purlin (apex). The roof sheeting is corrugated with a maximum span – continuous sheet of 1230mm. The end frames will be a "King Post Truss" style with no infill. The internal frame will be 'Rafter Frame' (no collar tie). The awning will be attached to the building's eaves and the end frames will be 200mm from the fascia board. The posts will be set back 450mm at the other end. The slope of the roof is 15 degrees to match profile of the shed. No walls are enclosed and the structure is to be considered 'Empty Under' (blocking ← 50% of the cross-section is obstructed).

For this location, the wind classification of the site is N3 in accordance with AS4055:2012.



Need to Determine:

King Post Truss and Rafter Frame member sizes
Adequacy of sheeting
Intermediate purlin size, quantity and spacing
Fascia beam size
Apex purlin size

Important

The design and certification of the following items is required by others:

- Existing and/or new foundations.
- Column (post) size and connection to the foundation.
- Connection bracket to the existing support structure (building).
- Approval of the structural adequacy or strengthening requirements of the existing structure to support the attached pitched roof.

Solution:

Input Variables

Covered Area Width	= 8000mm
Covered Area Length	= 6000mm
Gable End Roof Sheeting Overhang, RO	= 0mm
Fascia beam overhang, FBO	= 450mm

Span Table Parameters

Width of Awning Frame, W =	8000	= 7200mm
Column spacing, X = max. of	(3100,2450)	= 3100mm
Frame spacing, R =	(6000-200)/2	= 2900mm
End Awning Frame Load Width, LW_e =	R/2	= 1450mm
Internal Awning Frame Load Width, LW_i =	R	= 2900mm
Fascia beam overhang, FBO		= 450mm

Roof Geometry Check – Applicability of Colorbeam® Pitched Roof Span Tables

For an eaves height (h_e) of 2600mm (200mm → 2400mm standard), an awning frame width (W) of 8000mm (use W = 8100mm) and roof slope of 15° degrees, geometry limits (refer page 12) are:

$d_{l\ min.}$ = 3143mm {= 2943 + 200} ← d = W = 8000mm ... OK
$d_{l\ max.}$ = 12570mm {= 11770 + 200x4} → d = W = 8000mm ... OK

The span tables in this publication can be used to design the awning.

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Roof Sheeting Design

- Roof Slope, ϕ = 15° ... OK
- N3 wind classification
- Maximum continuous sheet span = 1230mm (edge of roof within 1200mm of corner, k_l = 2)

Refer to N3, 15°, 1200mm and W=8100mm maximum intermediate purlin spacing on page 50:

- 1048mm with 3 intermediate purlins ↖ 1230mm ... OK
- The corrugated roof sheeting is adequate for the project.

Awning Frame & Roof Member Design

Adequacy of Wind Loading

- Wind classification N3

  NOTE: Designer to confirm the adequacy the wind loading parameters used to determine wind pressures in the *Colorbeam® Pitched Roof Span Tables – Non Cyclonic Areas*, OR

  If wind classification not known, determine a Colorbeam® Pitched Roof wind classification, such that the project pressures are less than the design pressures used in this publication (see section 'Wind Loading').

- 'Empty Under' blocking level
- 3 sides open – no enclosed walls, except 1 side attached

Awning Frame Design

Refer to N3, 15°, Short Spanning roof sheet, 1200mm maximum Intermediate Purlin Spacing on page 50.

End Awning Frame: For W = 8000mm, the maximum awning frame load width for a 'King Post Truss' with W = 8100mm (→ 8000mm) and fabricated from the following Colorbeam® member sizes are:

CB100-12: LW = n/a
CB150-16: LW = n/a
CB200-20: LW = 3726 ↗ 1450mm ... OK

Internal Awning Frame: For W = 8100mm, the maximum awning frame load width for a 'King Post Truss' with W = 8100mm (→ 8000mm) and fabricated from the following Colorbeam® member sizes are:

CB100-12: LW = n/a
CB150-16: LW = n/a
CB200-20: LW = 3726 ↗ 2900mm ... OK

For ALL frames to be fabricated from the same Colorbeam® size, then the minimum Colorbeam® size is CB200-20.

Roof Member Design

Refer to N3, 15°, Short Spanning roof sheet, 1200mm maximum Intermediate Purlin Spacing on page 50.

For W = 8100 (→ 8000mm), the maximum fascia beam (fascia beam overhang, so min of: FB & X), fascia beam overhang (FBO) and purlin (P) spans for the following Colorbeam®member sizes are:

Colorbeam Type	Fascia Beam (min of: FB & X)	Fascia Beam Overhang (FBO)	Purlin (P)
CB100-12	NA	NA	4216mm ↗ 2900mm OK
CB150-16	NA	NA	6582mm ↗ 2900mm OK
CB200-20	4192mm ↗ 3100mm	1400mm ↗ 450mm	8596mm ↗ 2900mm OK

Selecting a smaller "W" value with a purlin spacing greater than 1035mm (W = 8000mm & 3 intermediate purlins) will allow a smaller Colorbeam size to be checked. For W = 6000mm and 2 intermediate purlins, purlin spacing is 1035mm. The maximum purlin spans of CB100-12 and CB150-16 are 4441mm and 6625mm.

The fascia beam members will be a CB200-20 Colorbeam. The intermediate and apex purlins can be CB100-12 Colorbeam.

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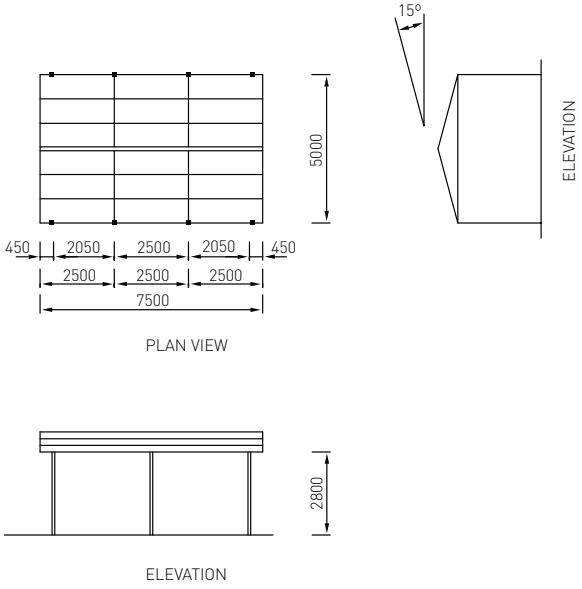
Worked Example 3:
Free Standing Pitched Roof

Requirements:

The free-standing BBQ area roof shall cover an area of 5000mm wide x 7500mm long. The frames will run across the width of the roof. The eaves height of the awning is 2800mm. The roof sheeting will have no gable or fascia beam overhang and will be short spanning roof sheet (span from the fascia (eaves) beam to intermediate purlins to double purlins (apex). The roof sheeting is corrugated with a maximum span – continuous sheet of 1230mm. The end frames will be a "No Web Truss" style with no infilled gable ends. The internal frames will be 'Collar Tie Frame'. The posts will be set back 450mm from the corners. The slope of the roof is 15 degrees. No walls are enclosed and the structure is to be considered 'Empty Under'.

For this location, the wind classification of the site is N3 in accordance with AS4055:2012.



Need to Determine:

No Web Truss and Collar Tie Frame member sizes
Adequacy of sheeting
Intermediate purlin size, quantity and spacing
Fascia beam size
Apex purlin size

Important

The design and certification of the following items is required by others:

- Existing and/or new foundations.
- Column (post) size and connection to the foundation.
- Connection bracket to the existing support structure (building).
- Approval of the structural adequacy or strengthening requirements of the existing structure to support the attached pitched roof.

Solution:

Input Variables

Covered Area Width	= 5000mm
Covered Area Length	= 7500mm
Gable End Roof Sheeting Overhang, RO	= 0mm
Fascia beam overhang, FBO	= 450mm

Span Table Parameters

Width of Awning Frame, W =	5000	= 5000mm
Column spacing, X =	max. of (2050, 2500)	= 2500mm
Frame spacing, R =	7500/3	= 2500mm
End Awning Frame Load Width, LW_e =	R/2	= 1250mm
Internal Awning Frame Load Width, LW_i =	R	= 2500mm
Fascia beam overhang, FBO		= 450mm

Roof Geometry Check – Applicability of Colorbeam® Pitched Roof Span Tables

For an eaves height (h_e) of 2800mm (400mm → 2400mm standard), an awning frame width (W) of 5000mm (use W = 5100mm and d = 7500mm, and roof slope of 15°, geometry limits (refer page 12) are:

$d_{l\ min.}$ = 3142mm {= 2742 + 400} ← (5000mm, 7500mm) ... OK
$d_{l\ max.}$ = 12567mm {=10967+ 400x4} → (5000mm, 7500mm) ... OK

The span tables in this publication can be used to design the awning.

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Roof Sheeting Design

- Roof Slope, ϕ = 15° ... OK
- N3 wind classification
- Maximum continuous sheet span = 1230mm (edge of roof within 1200mm of corner, $k_l = 2$)

Refer to N3, 15º, 1200mm and W=5100mm maximum Intermediate Purlin Spacing on page 50:

- 879mm with 2 intermediate purlins ↖ 1230mm ... OK
- The corrugated roof sheeting is adequate for the project.

Awning Frame & Roof Member Design

Adequacy of Wind Loading

- Wind classification N3

  NOTE: Designer to confirm the adequacy the wind loading parameters used to determine wind pressures in the *Colorbeam® Pitched Roof Span Tables – Non Cyclonic Areas*, OR

  If wind classification not known, determine a Colorbeam® Pitched Roof wind classification, such that the project pressures are less than the design pressures used in this publication (see section 'Wind Loading')

- 'Empty Under' blocking level
- 4 sides open – no enclosed walls.

Awning Frame Design

Refer to N3, 15º, 1200mm and W=5100mm maximum Intermediate Purlin Spacing on page 50:

End Awning Frame: For W = 5100mm (→ 5000mm), the maximum awning frame load width for a 'No Web Truss' with W = 5100mm and fabricated from the following Colorbeam® member sizes are:

CB100-12: LW = 1812mm ↗ 1250mm ... OK
CB150-16: LW = 2924mm ↗ 1250mm ... OK
CB200-20: LW = 4342mm ↗ 1250mm ... OK

Internal Awning Frame: For W = 5100mm (→ 5000mm), the maximum awning frame load width for a 'Collar Tie Frame' with W = 5100mm and fabricated from the following Colorbeam® member sizes are:

CB100-12: LW = 940mm ↖ 2500mm ... FAIL
CB150-16: LW = 2155mm ↖ 2500mm ... FAIL
CB200-20: LW = 3898mm ↗ 2500mm ... OK

To adopt the same size Colorbeam® for ALL frames the minimum Colorbeam® size is CB200-20.

Roof Member Design

Refer to N3, 15º, 1200mm and W=5100mm maximum Intermediate Purlin Spacing on page 50:

For W = 5100mm (→ 5000mm), the maximum fascia beam (fascia beam overhang, so min of: FB & X), fascia beam overhang (FBO) and purlin (P) spans for the following Colorbeam® member sizes are:

Colorbeam Type	Fascia Beam (min of: FB & X)	Fascia Beam Overhang (FBO)	Purlin (P)
CB100-12	2481mm ↖ 2500mm FAIL	700mm ↗ 450mm OK	4688mm ↖ 2500mm OK
CB150-16	3745mm ↗ 2500mm OK	1050mm ↗ 450mm OK	7078mm ↗ 2500mm OK
CB200-20	5145mm ↗ 2500mm OK	1400mm ↗ 450mm OK	9227mm ↗ 2500mm OK

The minimum size of Colorbeam® can be CB150-16 for the fascia beam members and CB100-12 for the intermediate and apex purlin members.

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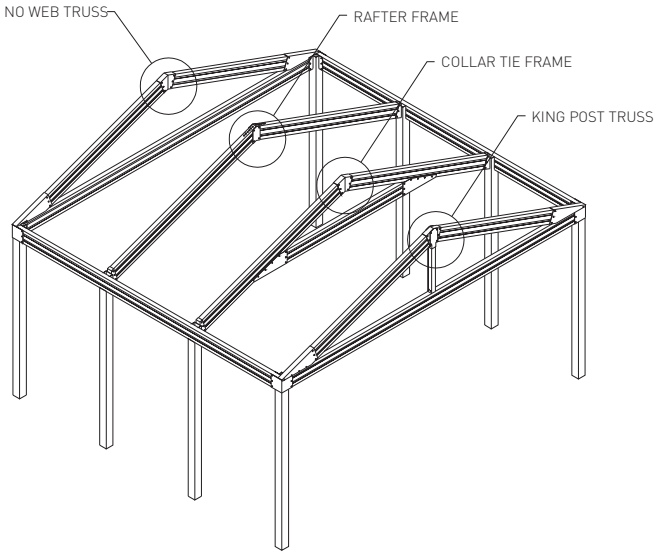
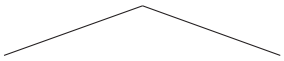
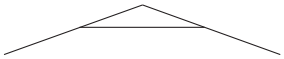
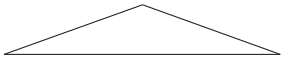
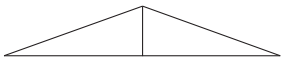
No Fascia Beam Overhang

IMPORTANT: The 'Rafter Only' and 'Collar Tie' frame types can ONLY BE USED as the end frames of roof arrangements with corner posts located at the corner – No Fascia Beam Overhang.

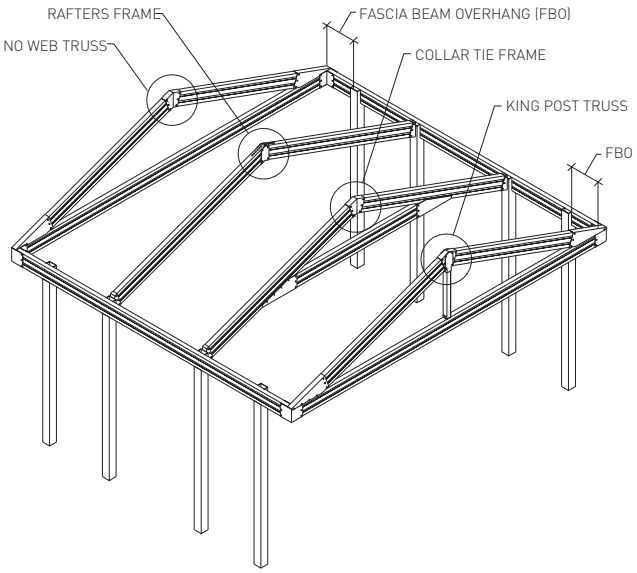
The tables indicate the locations where the frame type can be used.

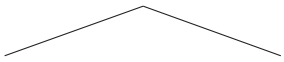
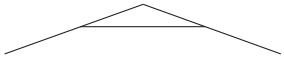
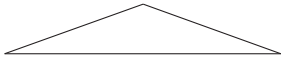
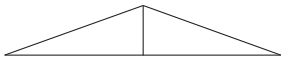


Frame Type	Frame Location	
	End	Internal
 Rafter Frame	✔	✔
 Collar Tie Frame	✔	✔
 No Web Truss	✔	✔
 King Post Truss	✔	✔

Fascia Beam Overhang

Use ONLY the King Post Truss or No Web Truss frame types as end frames on fascia beam overhangs.



Frame Type	Frame Location	
	End	Internal
 Rafter Frame	n/a	✔
 Collar Tie Frame	n/a	✔
 No Web Truss	✔	✔
 King Post Truss	✔	✔

n/a denotes not applicable

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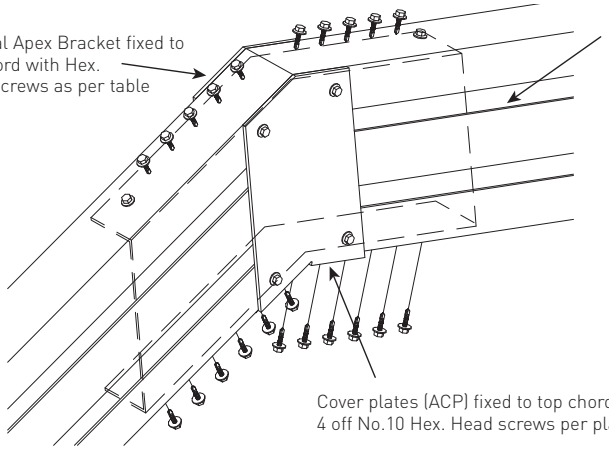
Connection 1
Apex Connection – Rafter Frame



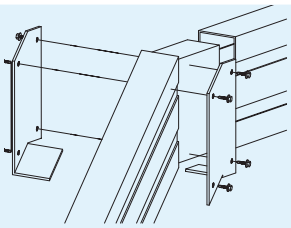


Figure 1

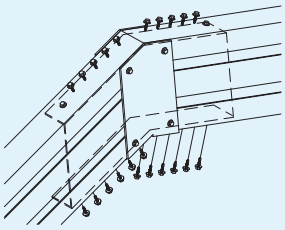


Figure 2

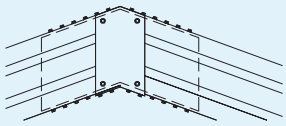
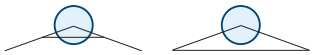
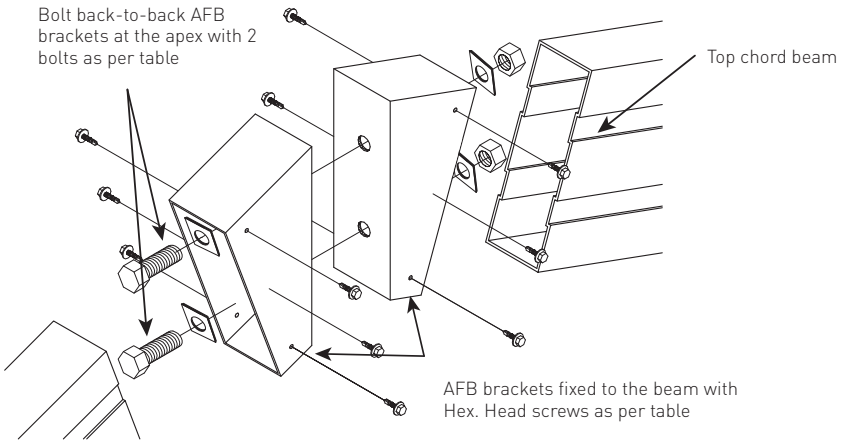


Figure 3

	APEX - TOP CHORD			ACP - TOP CHORD
Colorbeam Type	Screw Size	# of Screws	Minimum Screw Spacing (mm)	# of Screws
CB100-12	No.12	6	17	4
CB150-16	No.12	8	17	4
CB200-20	No.14	8	19	4

Connection 2
Apex Connection – Collar Tie Frame or No Web Truss





Use 40mm x 40mm x 3.0mm thick square washers

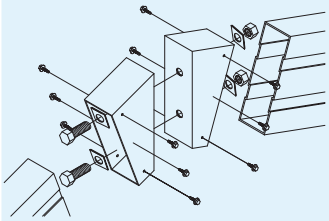


Figure 1

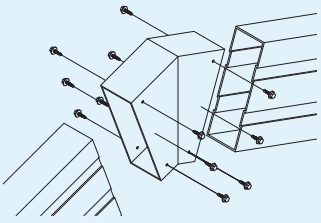


Figure 2

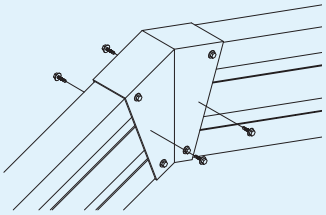


Figure 3

	AFB - AFB		AFB - TOP CHORD	
Colorbeam Type	Bolt Size	Bolt Spacing	Screw Size	# of Screws
CB100-12	M10	75	No.12	6
CB150-16	M12	125	No.12	6
CB200-20	M12	175	No.12	8

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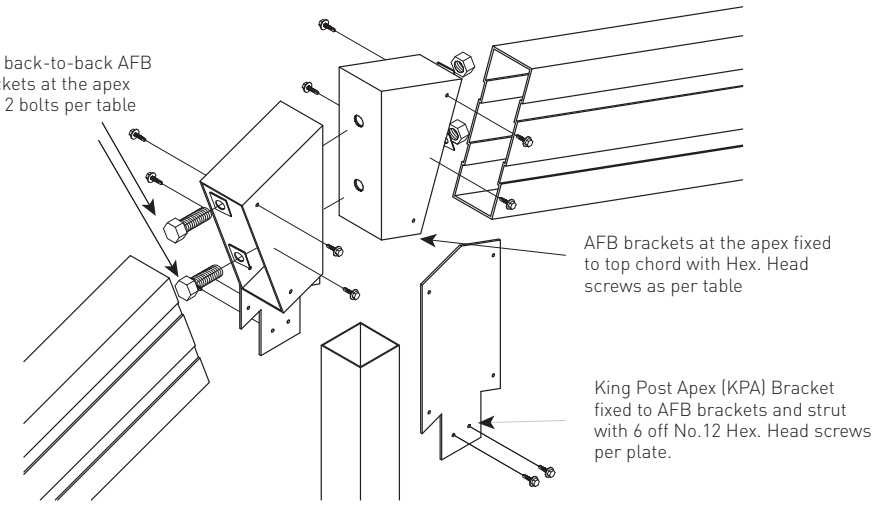
Connection 3
Apex Connection – King Post Truss



Use 40mm x 40mm x 3.0mm thick square washers

	AFB - AFB		AFB - TOP CHORD		KPA-AFB
Colorbeam Type	Bolt Size	Bolt Spacing	Screw Size	# of Screws	# of Screws
CB100-12	M10	75	No.12	6	6
CB150-16	M12	125	No.12	6	6
CB200-20	M12	175	No.12	8	6

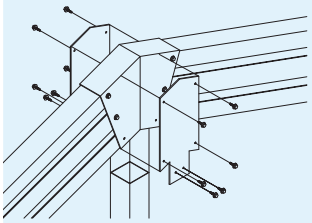


Figure 1

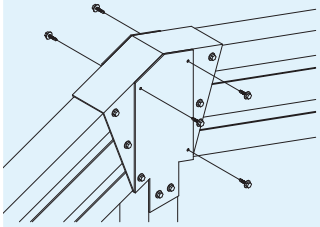


Figure 2

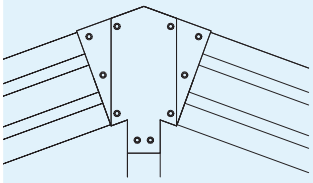
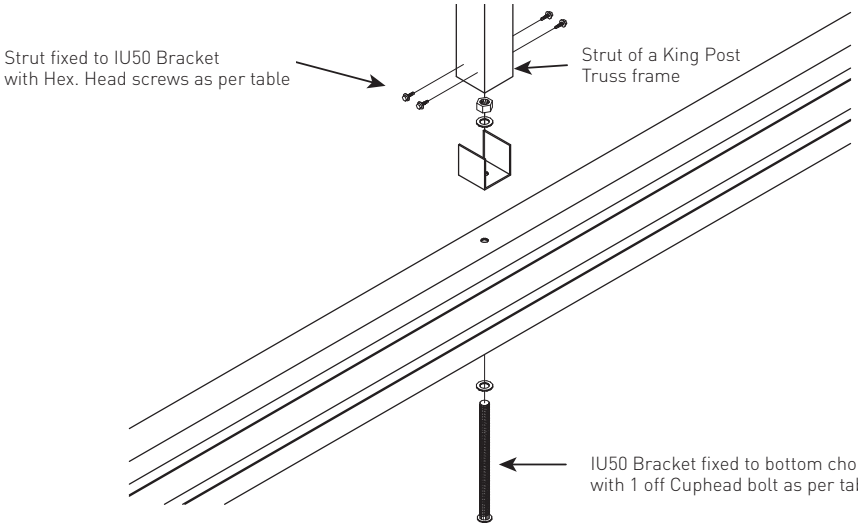


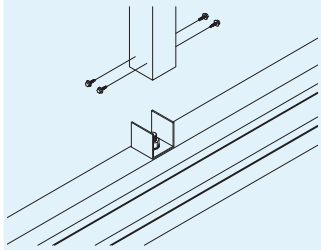
Figure 3

Connection 4
Strut to Bottom Chord Connection – King Post Truss



Use 32mm diameter x 2.5mm thick washers

	BOTTOM CHORD - IU50	IU BRKT - KING POST	
Colorbeam Type	Bolt Size	Screw Size	# of Screws
CB100-12	M8	No.12	4
CB150-16	M8	No.12	4
CB200-20	M8	No.12	4



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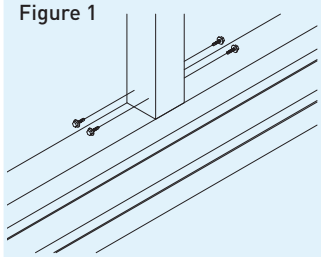

Figure 2

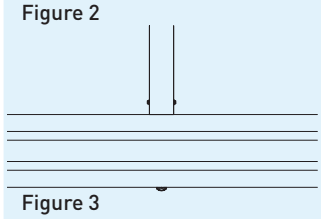

Figure 3

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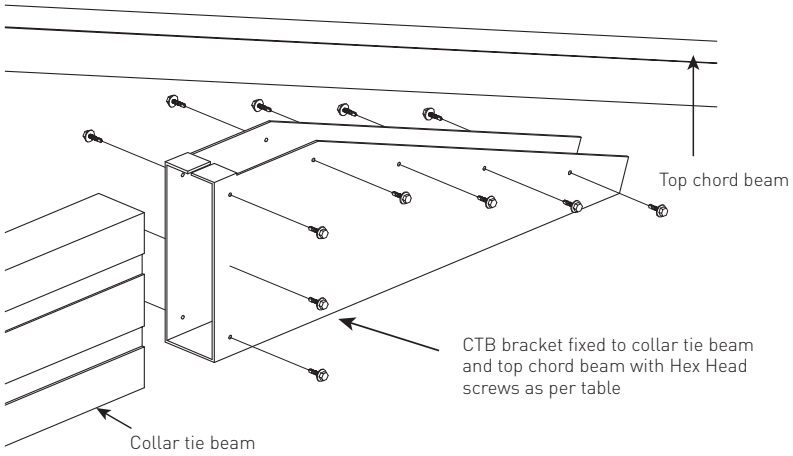
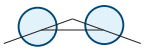
Connection 5
Collar Tie Connection – Collar Tie Frame





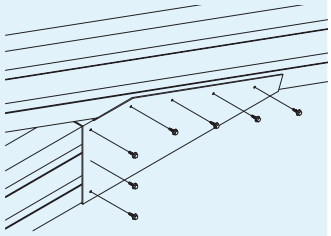


Figure 1

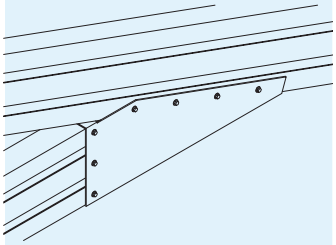


Figure 2

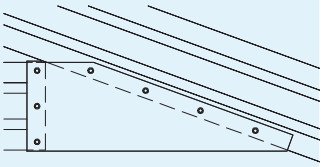
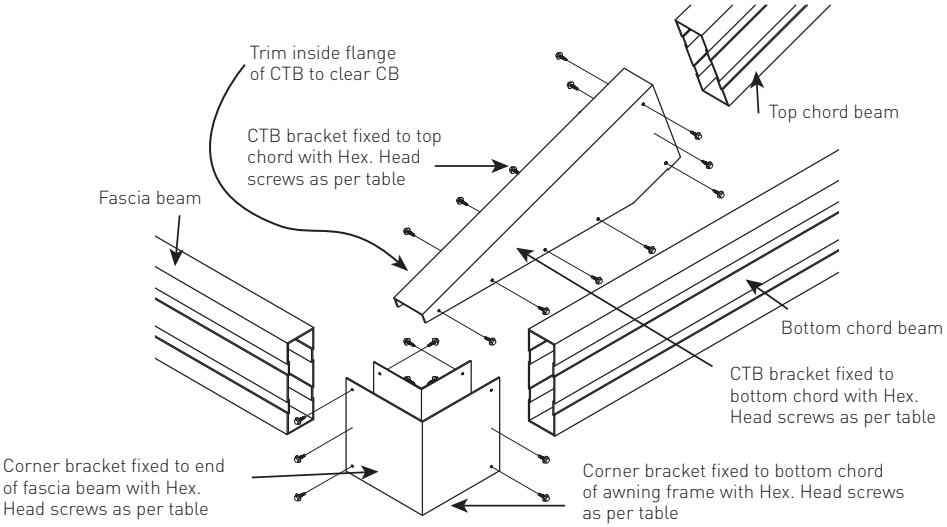


Figure 3

Colorbeam Type	CTB – Collar Tie		CTB – Top Chord	
	Screw Size	# of Screws	Screw Size	# of Screws
CB100-12	No.10	6	No.10	8
CB150-16	No.12	6	No.12	8
CB200-20	No.12	10	No.12	10

Connection 6
Heel Connection – No Web Truss or King Post Truss



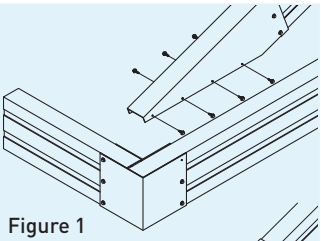


Figure 1

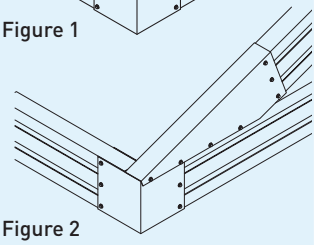


Figure 2

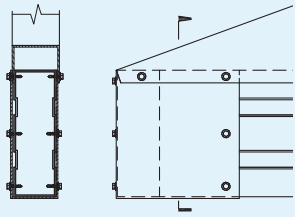


Figure 3 Figure 4

Figure 3 - section of the connection detail for correct CTB bracket installation

Colorbeam Type	CTB – Top Chord (TC) /Bottom Chord (BC)		Corner Bracket – Fascia Beam/Bottom Chord	
	Screw Size	# of Screws TC/BC	Screw Size	# of Screws
CB100-12	No.12	6/8	No.10	6
CB150-16	No.12	6/8	No.12	6
CB200-20	No.12	10/10	No.12	8

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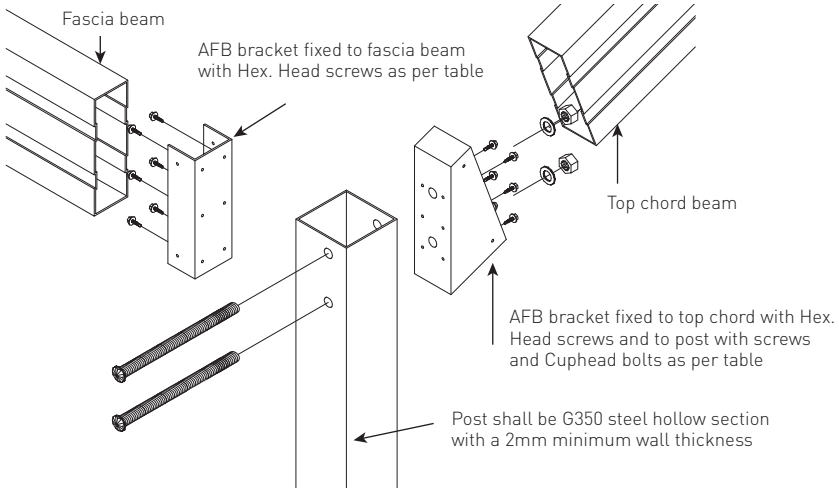
Connection 7
End Frame Connection – Rafter Frame or Collar Tie Frame



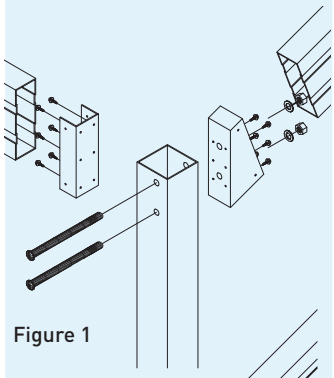


Figure 1

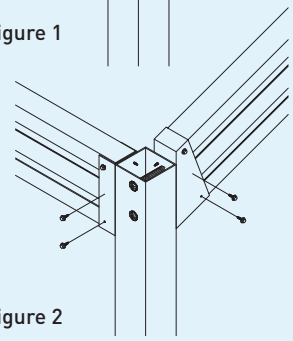
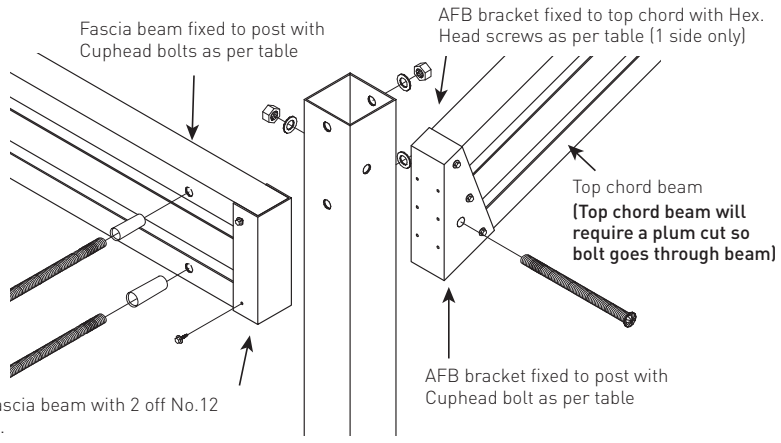


Figure 2

Use 32mm diameter x 2.5mm thick washers with nuts

Colorbeam Type	AFB – Top Chord/Post		AFB – Fascia Beam	
	Screw/Bolt Size	# of Screws/Bolts	Screw Size	# of Screws
CB100-12	No.12/M10	6/2	No.10/No.12	8/6
CB150-16	No.12/M12	6/2	No.12	8
CB200-20	No.12/M12	8/2	No.12	10

Connection 8
End Frame Connection – Rafter Frame or Collar Tie Frame



End cap fixed to fascia beam with 2 off No.12 Hex. Head screws.

End cap and AFB bracket connected with 6 off No.12 (CB100-12 & CB150-16) and 8 off No.12 (CB200-20) Hex Head screws (not shown for clarity)

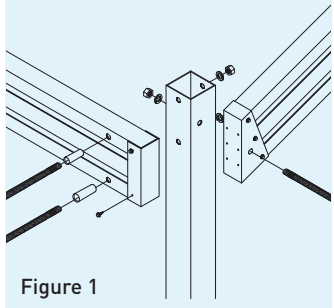


Figure 1

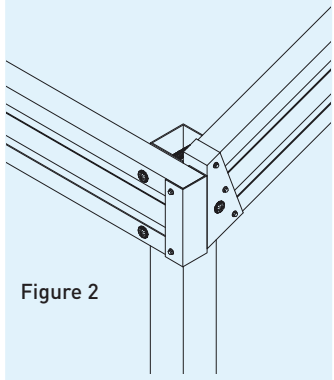


Figure 2

Use standard washers with nuts

Colorbeam Type	AFB – Top Chord/Post		Post – Fascia Beam	
	Screw/Bolt Size	# of Screws/Bolts	Bolt Size	# of Bolts
CB100-12	No.12/M10	6/1	M10	2
CB150-16	No.12/M12	6/1	M12	2
CB200-20	No.12/M12	8/1	M12	2

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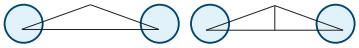
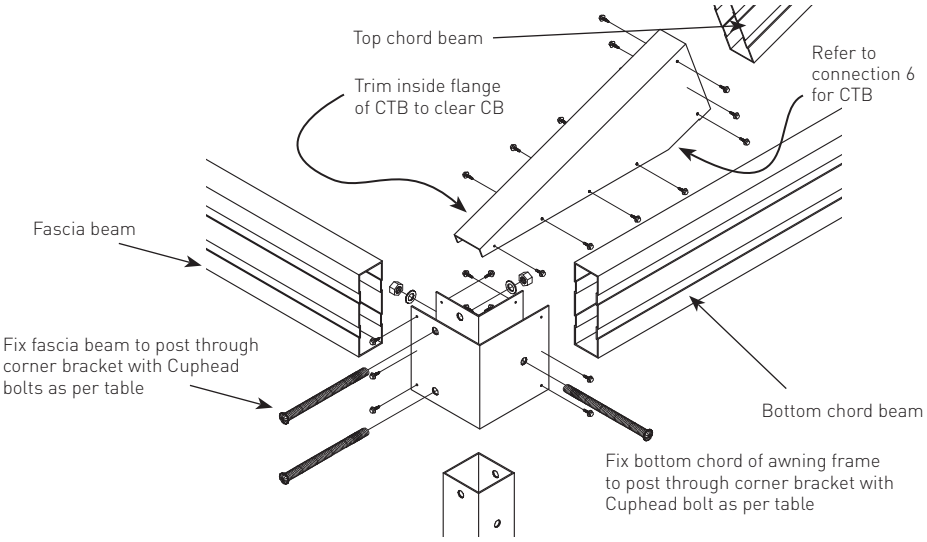
Connection 9
Corner Post Connection – No Fascia Beam Overhang





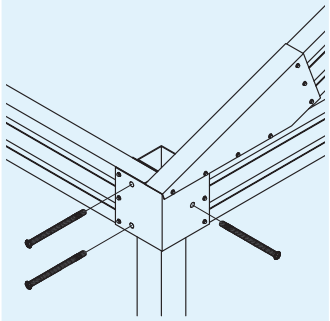


Figure 1

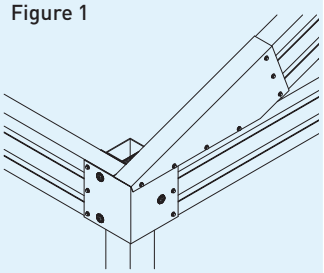
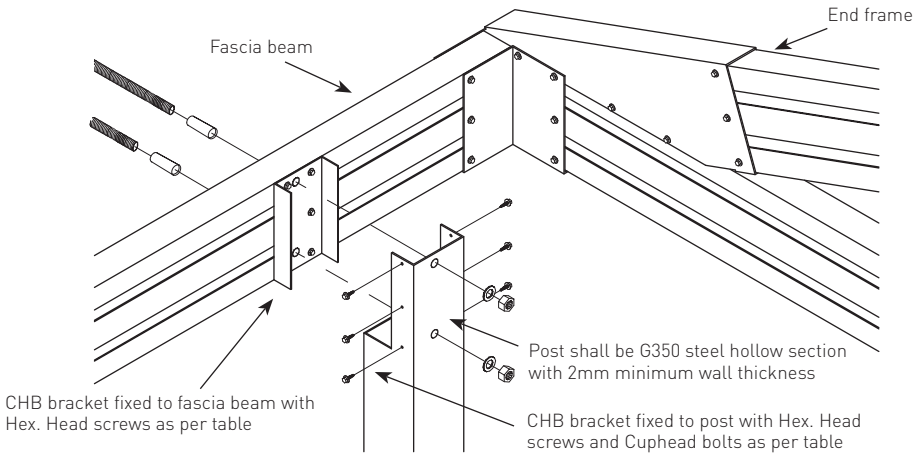


Figure 2

Use standard washers with nuts

Colorbeam Type	Corner Bracket – Fascia Beam/Post		Corner Bracket – Bottom Chord/Post	
	Bolt Size	# of Bolts	Bolt Size	# of Bolts
CB100-12	M10	2	M10	1
CB150-16	M12	2	M12	1
CB200-20	M12	2	M12	1

Connection 10
Rebated Corner Post Connection with Fascia Beam Overhang



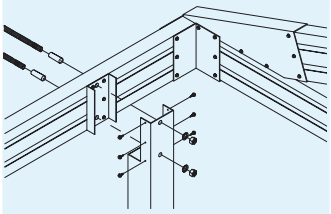


Figure 1

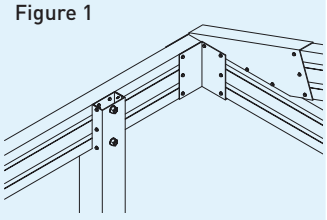


Figure 2

Use standard washers with nuts

Colorbeam Type	CHB – Fascia Beam		Fascia Beam/CHB – Post	
	Screw Size	# of Screws	Screw/Bolt Size	# of Screws/Bolts
CB100-12	No.10	8	No.10/M10	6/2
CB150-16	No.12	8	No.12/M12	6/2
CB200-20	No.12	10	No.12/M12	8/2

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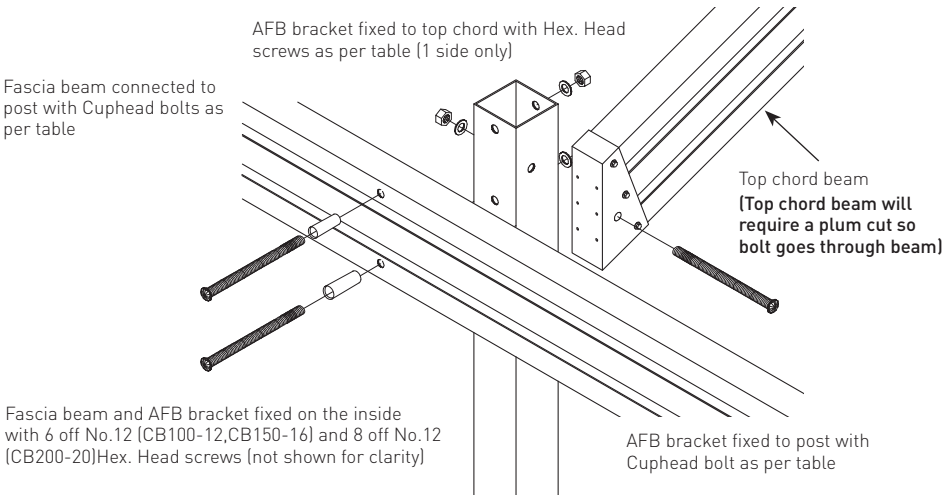
Connection 11
Internal Frame Connection to Side of Post



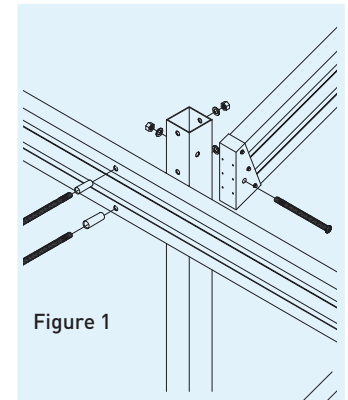


Figure 1

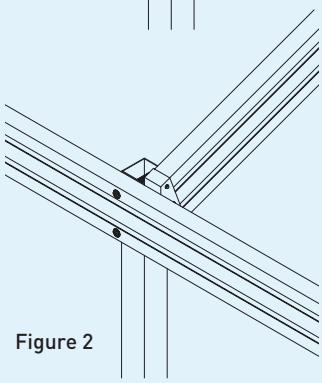
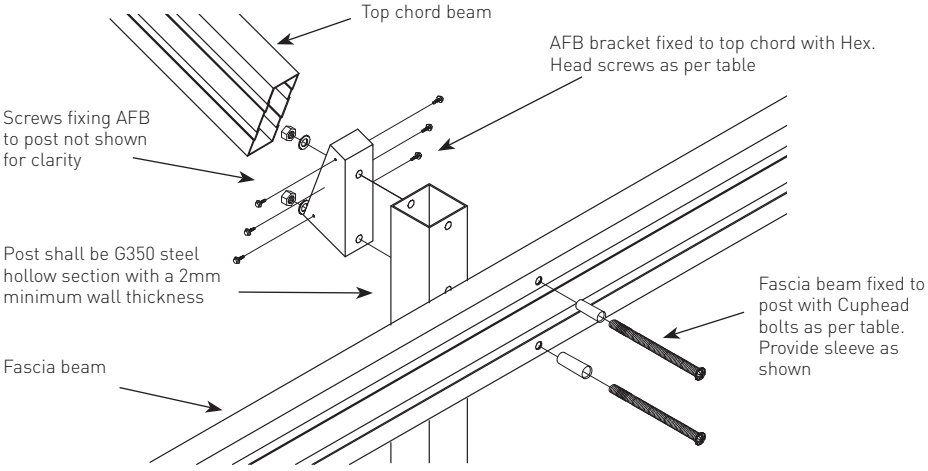


Figure 2

Use standard washers with nuts

Colorbeam Type	AFB – Top Chord/Post		Post – Fascia Beam	
	Screw/Bolt Size	# of Screws/Bolts	Bolt Size	# of Bolts
CB100-12	No.12/M10	3/1	M10	2
CB150-16	No.12/M12	3/1	M12	2
CB200-20	No.12/M12	4/1	M12	2

Connection 12
Internal Frame Connection to Inside of Post



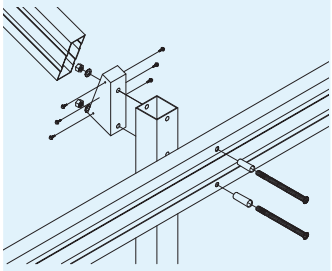


Figure 1

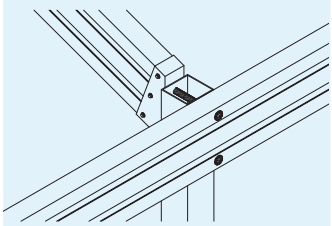


Figure 2

Use 32mm diameter x 2.5mm thick washers with nuts

Colorbeam Type	AFB – Post/Fascia Beam		AFB – Top Chord	
	Bolt Size	# of Bolts	Screw Size	# of Screws
CB100-12	M10	2	No.10/No.12	8/6
CB150-16	M12	2	No.12	6
CB200-20	M12	2	No.12	8

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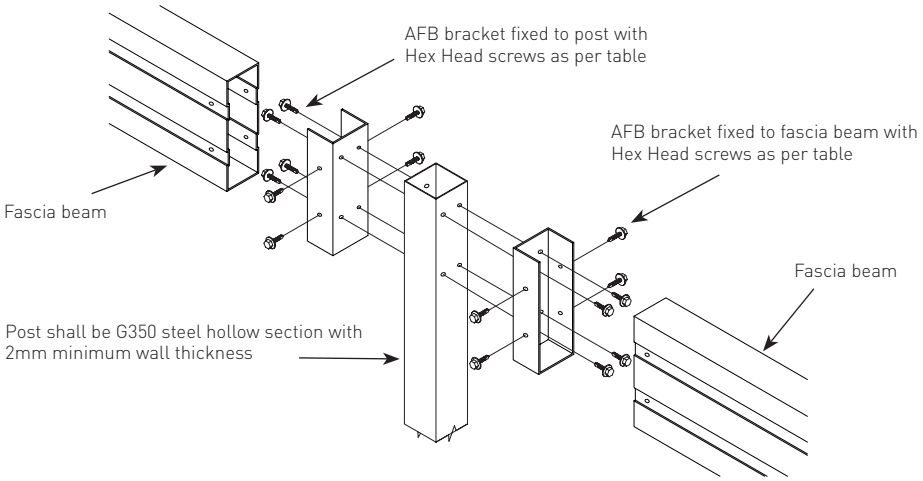
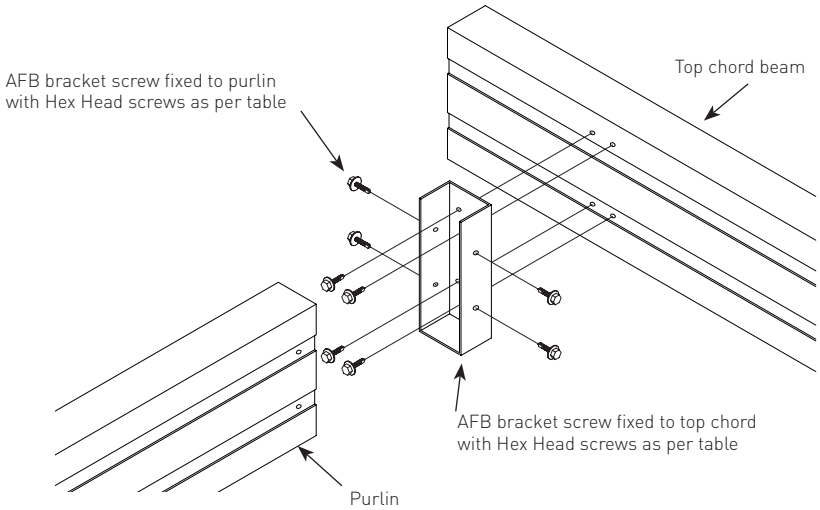
Connection 13
Fascia Beam End Connection to an Internal Post



Colorbeam Type	AFB – Fascia Beam		AFB – Post	
	Screw Size	# of Screws	Screw Size	# of Screws
CB100-12	No.12	6	No.12	6
CB150-16	No.12	6	No.12	6
CB200-20	No.12	8	No.12	8

Connection 14
Purlin Connection



Colorbeam Type	AFB – Purlin		AFB – Top Chord	
	Screw Size	# of Screws	Screw Size	# of Screws
CB100-12	No.12	6	No.12	6
CB150-16	No.12	6	No.12	6
CB200-20	No.12	8	No.12	8

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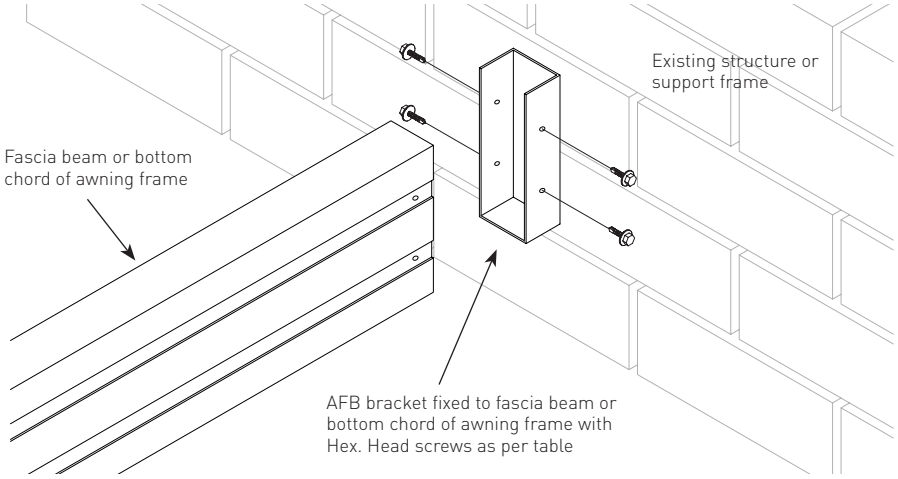
Connection 15
Fascia Beam End Connection to Existing Structure



Colorbeam Type	AFB – Fascia Beam	
	Screw Size	# of Screws
CB100-12	No.10	6
CB150-16	No.12	6
CB200-20	No.12	8

Important:

The project engineer or designer will be responsible for the design and approval of the connection of the AFB bracket to existing structure or support, the support frame and structural adequacy of the existing structure.

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STANDARD AWNING ARRANGEMENTS

SPAN TABLES

'Empty Under' Pitched Roofs:
Attached 1 side or Free-Standing

Wind Classification	Roof Pitch	Page
N2	15º	34
	22.5º	38
W36	15º	42
	22.5º	46
N3	15º	50
	22.5º	54
N4	15º	58
	22.5º	62
N5	15º	66
	22.5º	70

Roof Sheet - Long Spanning
No Intermediate Purlins

Maximum Load Width of Frames

Maximum Allowable Awning Frame Load Width, LW (mm)

W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	10830	15000	15000	13417	15000	15000	15000	15000	15000	15000	15000	15000
1800	8020	15000	15000	10283	15000	15000	15000	15000	15000	15000	15000	15000
2100	6150	12590	15000	8098	15000	15000	15000	15000	15000	15000	15000	15000
2400	4850	10210	15000	6524	12702	15000	15000	15000	15000	15000	15000	15000
2700	3920	8430	13040	5356	10680	15000	11870	15000	15000	11954	15000	15000
3000	3220	7060	11170	4470	9106	13462	9549	15000	15000	9617	15000	15000
3300	2700	5990	9650	3782	7863	11846	7790	13042	15000	7848	15000	15000
3600	2290	5130	8410	3238	6850	10505	6176	10085	14675	6445	13405	15000
3900	1960	4440	7390	2801	6016	9376	4929	8040	11699	5315	10974	15000
4200	1700	3860	6550	2446	5320	8417	4009	6533	9506	4517	9259	15000
4500	1390	3370	5840	2152	4735	7595	3282	5341	7772	3848	7821	13097
4800		2970	5230	1908	4238	6885	2769	4501	6550	3275	6589	11040
5100		2630	4720	1702	3813	6267	2334	3768	5594	2853	5705	9590
5400		2340	4270	1527	3448	5726	1982	3132	4973	2496	4958	8359
5700		2100	3880	1378	3131	5251	1728	2702	4318	2181	4302	7270
6000		1880	3540	1249	2855	4831	1527	2382	3680	1931	3783	6418
6300		1700	3250	1138	2613	4458	1454	2128	3192	1723	3350	5711
6600		1510	2980	1040	2399	4124	1388	1906	2770	1536	2963	5074
6900			2740		2210	3677		1718	2423		2643	4530
7200			2530		2010	3229		1535	2134		2386	4075
7500			2330		1747	2816		1359	1881		2152	3661
7800			2160			2554			1677			3295
8100			2000			2312			1495			3002
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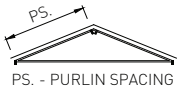

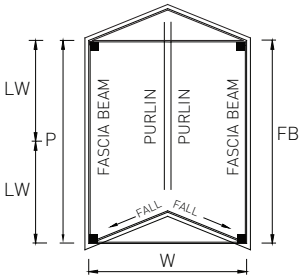

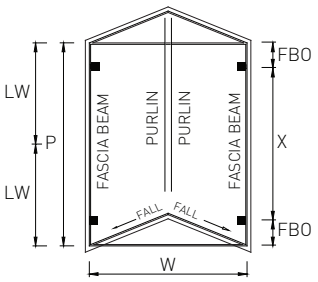

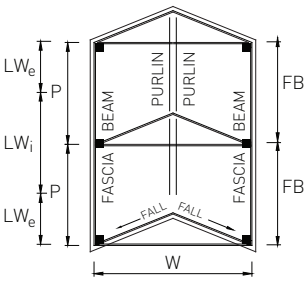

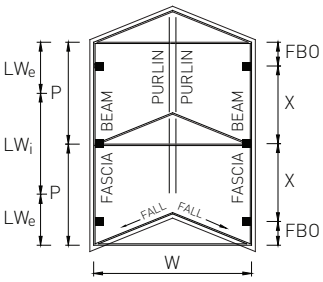

Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	6000	9000	12000	3968	5991	8239	6000	9000	12000
1800	6000	9000	12000	3732	5632	7745	6000	9000	12000
2100	5903	8912	11965	3542	5347	7351	5903	8912	11965
2400	5646	8524	11572	3387	5113	7026	5646	8524	11572
2700	5429	8195	11179	3256	4914	6754	5429	8195	11179
3000	5241	7913	10742	3140	4743	6520	5241	7913	10742
3300	5077	7665	10356	3043	4594	6314	5077	7665	10356
3600	4932	7446	10012	2954	4462	6132	4932	7446	10012
3900	4802	7250	9702	2877	4342	5970	4802	7250	9702
4200	4685	7073	9420	2806	4237	5824	4685	7073	9420
4500	4579	6912	9164	2744	4142	5692	4579	6912	9164
4800	4481	6765	8928	2685	4052	5569	4481	6765	8928
5100	4391	6630	8711	2630	3973	5458	4391	6630	8711
5400	4309	6504	8510	2583	3897	5356	4309	6504	8510
5700	4232	6332	8323	2536	3829	5260	4232	6332	8323
6000	4160	6172	8148	2493	3764	5172	4160	6172	8148
6300	4093	6024	7984	2452	3703	5088	4093	6024	7984
6600	4030	5897	7831	2417	3649	5011	4030	5897	7831
6900	3941	5779	7686		3595	4937	3941	5779	7686
7200	3858	5668	7550		3531	4870	3858	5668	7550
7500	3780	5564	7413		3451	4804	3780	5564	7413
7800	3707	5456	7279			4742	3707	5456	7279
8100	3638	5354	7152			4642	3638	5354	7152
8400	3572	5257	7032			4549	3572	5257	7032
8700	3510	5166	6918			4453	3510	5166	6918
9000	3451	5079	6809			4370	3451	5079	6809
FBO				700	1050	1400			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	No Intermediate Purlins
932	
1087	
1242	
1398	
1553	
1708	
1863	
2019	
2174	
2329	
2485	
2640	
2795	
2951	
3106	
3261	
3416	
3572	
3727	
3882	
4038	
4193	
4348	
4503	
4659	

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.98	0.93	1.00
	0.59	0.70	0.79
	0.41	0.58	0.59

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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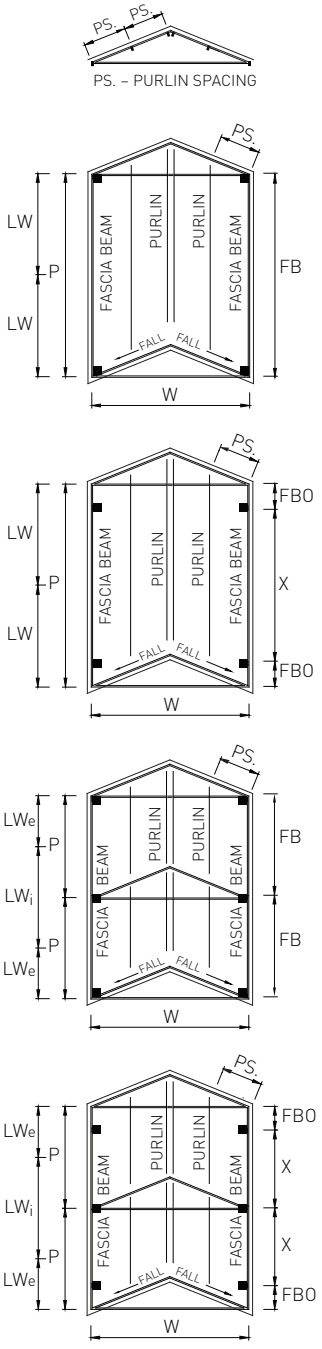
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1200mm

Maximum Load Width of Frames

Maximum Allowable Awning Frame Load Width, LW (mm)

W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	10830	15000	15000	13417	15000	15000	15000	15000	15000	15000	15000	15000
1800	8020	15000	15000	10283	15000	15000	15000	15000	15000	15000	15000	15000
2100	6150	12590	15000	8098	15000	15000	15000	15000	15000	15000	15000	15000
2400	4850	10270	15000	4925	10272	15000	15000	15000	15000	15000	15000	15000
2700	3920	8480	13310	3972	8575	12849	12798	15000	15000	12798	15000	15000
3000	3230	7100	11390	3270	7251	11052	10328	15000	15000	10833	15000	15000
3300	2700	6020	9840	2735	6101	9672	7981	13042	15000	9177	15000	15000
3600	2290	5170	8590	2321	5204	8532	6176	10085	14675	7791	15000	15000
3900	1960	4480	7550	1995	4490	7578	4929	8040	11699	6692	14093	15000
4200	1700	3920	6680	1732	3914	6772	4009	6533	9506	5798	12596	15000
4500	1390	3450	5950	1518	3442	6084	3282	5341	7772	5067	11245	15000
4800		3070	5380	1360	3109	5538	2769	4501	6550	4640	10253	15000
5100		2740	4850	1211	2776	5022	2334	3768	5594	4132	9295	14324
5400		2460	4380	1085	2494	4555	1982	3132	4973	3703	8393	13189
5700		2220	3980	978	2252	4122	1728	2702	4318	3337	7579	12181
6000		2010	3630	886	2044	3748	1527	2382	3680	3021	6870	10673
6300		1740	3320	806	1863	3422	1454	2128	3192	2746	6250	9485
6600		1510	3050	737	1705	3137	1388	1906	2770	2506	5709	8411
6900			2810		1567	2886		1718	2423		5086	7432
7200			2620		1460	2701		1535	2134		4531	6640
7500			2420		1350	2501		1359	1881		4069	5963
7800			2250			2323			1677			5340
8100			2100			2163			1495			4801
8400			1910			2019			1340			4372
8700			1710			1889			1207			3973
9000			1550			1771			1087			3602



Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	6000	9000	12000	3970	5993	8237	6000	9000	12000
1800	6000	9000	12000	3731	5633	7747	6000	9000	12000
2100	5903	8912	11965	3541	5348	7352	5903	8912	11965
2400	6000	9000	12000	3386	5112	7028	5399	8151	10944
2700	6000	9000	12000	3254	4912	6753	5192	7838	10627
3000	6000	9000	12000	3142	4741	6519	5012	7567	10285
3300	6000	9000	12000	3041	4592	6313	4856	7331	9909
3600	6000	9000	12000	2955	4460	6131	4717	7121	9575
3900	6000	9000	12000	2876	4344	5968	4593	6934	9274
4200	6000	9000	12000	2807	4236	5823	4481	6764	9002
4500	6000	9000	12000	2742	4141	5690	4379	6611	8753
4800	6000	9000	12000	2683	4054	5570	5081	7671	10448
5100	6000	9000	12000	2632	3972	5457	4979	7517	10206
5400	6000	9000	12000	2581	3899	5355	4885	7376	9981
5700	6000	9000	12000	2537	3828	5261	4798	7244	9771
6000	6000	9000	12000	2494	3765	5171	4717	7121	9575
6300	6000	9000	12000	2454	3704	5089	4641	7006	9391
6600	6000	9000	12000	2416	3647	5010	4569	6898	9218
6900	5942	9000	12000		3593	4938	4468	6797	9054
7200	6000	9000	12000		3535	4869	4751	7376	9981
7500	6000	9000	12000		3455	4805	4655	7276	9822
7800	6000	9000	12000			4738	4564	7134	9671
8100	5955	9000	12000			4638	4478	7000	9528
8400	5847	9000	12000			4545	4397	6873	9391
8700	5748	8985	12000			4457	4322	6756	9260
9000	5651	8833	12000			4367	4249	6642	9135
FBO				700	1050	1400			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	0
932	0
1087	0
621	1
698	1
776	1
854	1
931	1
1009	1
1087	1
1164	1
828	2
879	2
931	2
983	2
1035	2
1087	2
1138	2
1190	2
931	3
970	3
1009	3
1048	3
1087	3
1125	3
1164	3

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	1.00	0.96	1.00
	0.56	0.73	0.79
	0.39	0.61	0.59

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM® Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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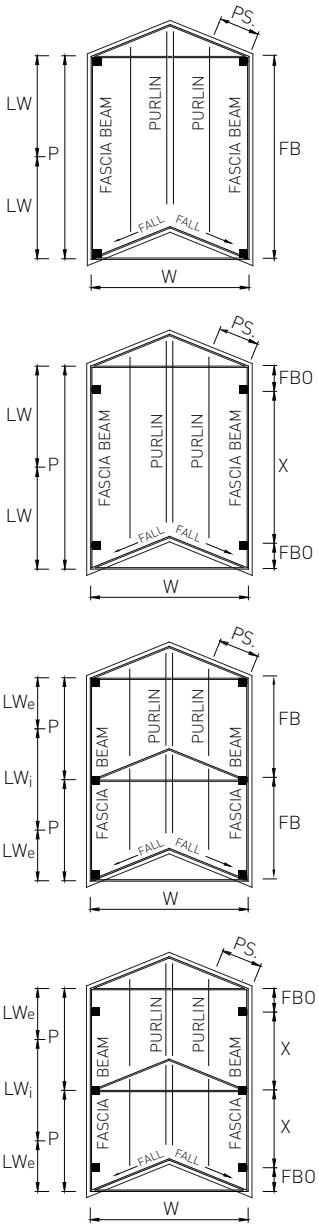
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1800mm

Maximum Load Width of Frames

Maximum Allowable Awning Frame Load Width, LW (mm)												
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	10830	15000	15000	13417	15000	15000	15000	15000	15000	15000	15000	15000
1800	8020	15000	15000	10283	15000	15000	15000	15000	15000	15000	15000	15000
2100	6150	12590	15000	8098	15000	15000	15000	15000	15000	15000	15000	15000
2400	4850	10210	15000	6524	12702	15000	15000	15000	15000	15000	15000	15000
2700	3920	8430	13040	5356	10680	15000	11870	15000	15000	11954	15000	15000
3000	3220	7060	11170	4470	9106	13462	9549	15000	15000	9617	15000	15000
3300	2700	5990	9650	3782	7863	11846	7790	13042	15000	7848	15000	15000
3600	2290	5170	8590	2321	5204	8532	6176	10085	14675	7791	15000	15000
3900	1960	4480	7550	1995	4490	7578	4929	8040	11699	6692	14093	15000
4200	1700	3920	6680	1732	3914	6772	4009	6533	9506	5798	12596	15000
4500	1390	3450	5950	1518	3442	6084	3282	5341	7772	5067	11245	15000
4800		3060	5330	1342	3049	5493	2769	4501	6550	4462	9913	15000
5100		2730	4800	1194	2720	4929	2334	3768	5594	3956	8793	14161
5400		2450	4330	1069	2441	4432	1982	3132	4973	3527	7840	13047
5700		2210	3930	963	2203	4005	1728	2702	4318	3160	7023	12055
6000		2010	3580	871	1995	3630	1527	2382	3680	2845	6320	10673
6300		1740	3280	791	1814	3301	1454	2128	3192	2573	5708	9485
6600		1510	3010	722	1657	3013	1388	1906	2770	2334	5169	8411
6900			2770		1518	2760		1718	2423		4692	7432
7200			2600		1444	2663		1535	2134		4531	6640
7500			2400		1336	2466		1359	1881		4069	5963
7800			2230			2289			1677			5340
8100			2080			2131			1495			4801
8400			1910			1988			1340			4372
8700			1710			1859			1207			3973
9000			1550			1739			1087			3602

PS. – PURLIN SPACING



Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)										Purlin Details	
W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Max. Purlin Spacing (mm)	Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	6000	9000	12000	3970	5993	8237	6000	9000	12000	776	0
1800	6000	9000	12000	3731	5633	7747	6000	9000	12000	932	0
2100	5903	8912	11965	3541	5348	7352	5903	8912	11965	1087	0
2400	5646	8524	11572	3386	5112	7028	5646	8524	11572	1242	0
2700	5429	8195	11179	3254	4912	6753	5429	8195	11179	1398	0
3000	5241	7913	10742	3142	4741	6519	5241	7913	10742	1553	0
3300	5077	7665	10356	3041	4592	6313	5077	7665	10356	1708	0
3600	6000	9000	12000	2955	4460	6131	4717	7121	9575	931	1
3900	6000	9000	12000	2876	4344	5968	4593	6934	9274	1009	1
4200	6000	9000	12000	2807	4236	5823	4481	6764	9002	1087	1
4500	6000	9000	12000	2742	4141	5690	4379	6611	8753	1164	1
4800	5903	8912	11965	2683	4054	5570	4286	6470	8525	1242	1
5100	5785	8733	11785	2632	3972	5457	4200	6325	8315	1319	1
5400	5676	8568	11618	2581	3899	5355	4121	6148	8121	1397	1
5700	5574	8415	11462	2537	3828	5261	4047	5986	7940	1475	1
6000	5480	8273	11297	2494	3765	5171	3978	5849	7772	1552	1
6300	5391	8139	11092	2454	3704	5089	3913	5721	7614	1630	1
6600	5308	8014	10899	2416	3647	5010	3826	5601	7463	1708	1
6900	5193	7896	10717		3593	4938	3743	5488	7311	1785	1
7200	2521	8912	11965		3535	4869	4463	6701	8900	1242	2
7500	2470	8791	11843		3455	4805	4372	6611	8753	1294	2
7800	2423	8623	11728			4738	4288	6484	8614	1345	2
8100	2377	8461	11618			4638	4208	6362	8482	1397	2
8400	2334	8308	11513			4545	4132	6247	8356	1449	2
8700	2294	8162	11412			4457	4059	6138	8236	1501	2
9000	2256	8027	11297			4367	3992	6036	8121	1552	2
FBO				700	1050	1400					

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	1.00	0.95	1.00
	0.60	0.71	0.79
	0.41	0.59	0.59

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM® Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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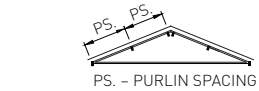
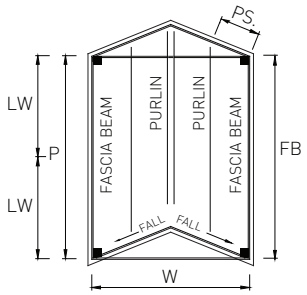
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 2400mm

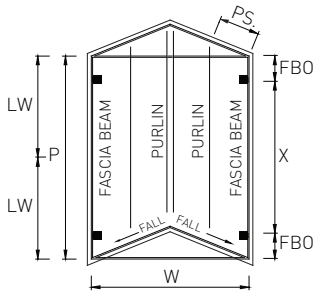
Maximum Load Width of Frames

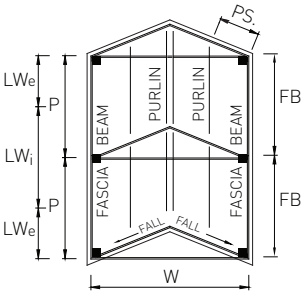
Maximum Allowable Awning Frame Load Width, LW (mm)

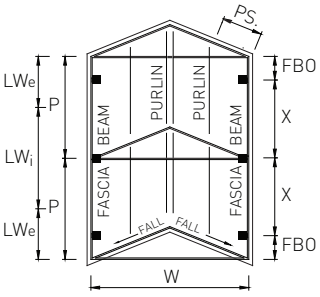
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	10830	15000	15000	13417	15000	15000	15000	15000	15000	15000	15000	15000
1800	8020	15000	15000	10283	15000	15000	15000	15000	15000	15000	15000	15000
2100	6150	12590	15000	8098	15000	15000	15000	15000	15000	15000	15000	15000
2400	4850	10210	15000	6524	12702	15000	15000	15000	15000	15000	15000	15000
2700	3920	8430	13040	5356	10680	15000	11870	15000	15000	11954	15000	15000
3000	3220	7060	11170	4470	9106	13462	9549	15000	15000	9617	15000	15000
3300	2700	5990	9650	3782	7863	11846	7790	13042	15000	7848	15000	15000
3600	2290	5130	8410	3238	6850	10505	6176	10085	14675	6445	13405	15000
3900	1960	4440	7390	2801	6016	9376	4929	8040	11699	5315	10974	15000
4200	1700	3860	6550	2446	5320	8417	4009	6533	9506	4517	9259	15000
4500	1390	3370	5840	2152	4735	7595	3282	5341	7772	3848	7821	13097
4800		3060	5330	1342	3049	5493	2769	4501	6550	4462	9913	15000
5100		2730	4800	1194	2720	4929	2334	3768	5594	3956	8793	14161
5400		2450	4330	1069	2441	4432	1982	3132	4973	3527	7840	13047
5700		2210	3930	963	2203	4005	1728	2702	4318	3160	7023	12055
6000		2010	3580	871	1995	3630	1527	2382	3680	2845	6320	10673
6300		1740	3280	791	1814	3301	1454	2128	3192	2573	5708	9485
6600		1510	3010	722	1657	3013	1388	1906	2770	2334	5169	8411
6900			2770		1518	2760		1718	2423		4692	7432
7200			2550		1395	2535		1535	2134		4265	6640
7500			2360		1287	2336		1359	1881		3881	5963
7800			2190			2158			1677			5340
8100			2040			1998			1495			4801
8400			1910			1854			1340			4372
8700			1710			1724			1207			3973
9000			1550			1607			1087			3602











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Purlin Details: Max. Purlin Spacing (mm)	Purlin Details: Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	6000	9000	12000	3970	5993	8237	6000	9000	12000	776	0
1800	6000	9000	12000	3731	5633	7747	6000	9000	12000	932	0
2100	5903	8912	11965	3541	5348	7352	5903	8912	11965	1087	0
2400	5646	8524	11572	3386	5112	7028	5646	8524	11572	1242	0
2700	5429	8195	11179	3254	4912	6753	5429	8195	11179	1398	0
3000	5241	7913	10742	3142	4741	6519	5241	7913	10742	1553	0
3300	5077	7665	10356	3041	4592	6313	5077	7665	10356	1708	0
3600	4932	7446	10012	2955	4460	6131	4932	7446	10012	1863	0
3900	4802	7250	9702	2876	4344	5968	4802	7250	9702	2019	0
4200	4685	7073	9420	2807	4236	5823	4685	7073	9420	2174	0
4500	4579	6912	9164	2742	4141	5690	4579	6912	9164	2329	0
4800	5903	8912	11965	2683	4054	5570	4286	6470	8525	1242	1
5100	5785	8733	11785	2632	3972	5457	4200	6325	8315	1319	1
5400	5676	8568	11618	2581	3899	5355	4121	6148	8121	1397	1
5700	5574	8415	11462	2537	3828	5261	4047	5986	7940	1475	1
6000	5480	8273	11297	2494	3765	5171	3978	5849	7772	1552	1
6300	5391	8139	11092	2454	3704	5089	3913	5721	7614	1630	1
6600	5308	8014	10899	2416	3647	5010	3826	5601	7463	1708	1
6900	5193	7896	10717		3593	4938	3743	5488	7311	1785	1
7200	5083	7785	10544		3535	4869	3664	5383	7167	1863	1
7500	4980	7680	10379		3455	4805	3589	5283	7032	1941	1
7800	4884	7532	10223			4738	3520	5181	6905	2018	1
8100	4792	7390	10074			4638	3454	5084	6784	2096	1
8400	4705	7257	9931			4545	3391	4992	6670	2174	1
8700	4624	7131	9795			4457	3333	4906	6561	2251	1
9000	4546	7011	9665			4367	3277	4823	6457	2329	1
FBO				628	905	1064					

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	1.00	0.94	0.78
	0.60	0.71	0.26
	0.41	0.59	0.07

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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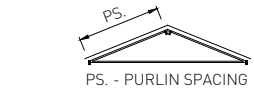
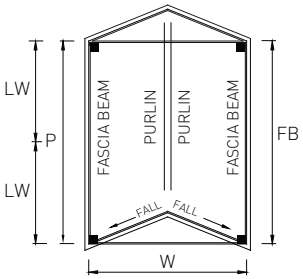
Roof Sheet - Long Spanning
No Intermediate Purlins

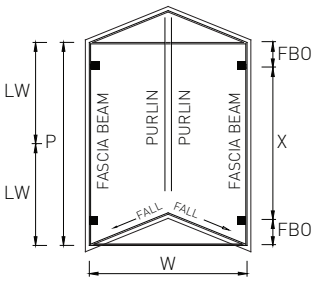
Maximum Load Width of Frames

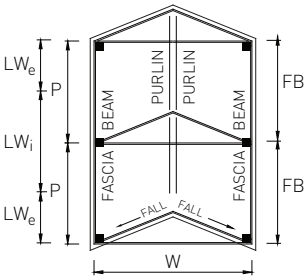
Maximum Allowable Awning Frame Load Width, LW (mm)

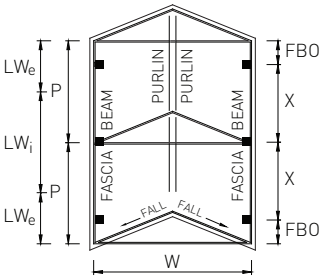
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	10170	15000	15000	12709	15000	15000	15000	15000	15000	15000	15000	15000
1800	7500	15000	15000	9699	15000	15000	15000	15000	15000	15000	15000	15000
2100	5740	11870	15000	7613	14551	15000	14513	15000	15000	14465	15000	15000
2400	4520	9600	14620	6118	12016	15000	11906	15000	15000	11901	15000	15000
2700	3640	7900	12340	5012	10079	14757	9925	15000	15000	9946	15000	15000
3000	3000	6600	10540	4176	8587	12803	7985	15000	15000	8088	15000	15000
3300	2500	5590	9090	3529	7400	11246	6506	13854	15000	6587	13915	15000
3600	2120	4790	7900	3018	6436	9956	5333	11280	15000	5397	11427	15000
3900	1820	4120	6940	2608	5643	8872	4464	9363	15000	4515	9482	15000
4200	1580	3570	6140	2275	4983	7953	3788	7871	13112	3830	7969	13501
4500	1370	3120	5470	2000	4429	7166	3221	6620	10721	3255	6700	11367
4800		2740	4900	1772	3961	6487	2776	5656	9036	2804	5723	9734
5100		2430	4410	1580	3560	5898	2422	4895	7716	2446	4953	8455
5400		2150	3990	1417	3216	5383	2114	4238	6860	2134	4286	7337
5700		1910	3620	1278	2918	4931	1863	3702	5956	1879	3744	6432
6000		1700	3300	1158	2659	4532	1658	3267	5076	1672	3304	5705
6300		1520	3020	1055	2432	4178	1476	2883	4404	1488	2914	5056
6600		1380	2770	964	2232	3861	1321	2564	3821	1332	2592	4501
6900			2530		2055	3577		2309	3343		2333	4035
7200			2300		1898	3323		2078	2944		2100	3614
7500			2100		1757	3093		1875	2595		1897	3250
7800			1920			2885			2313			2952
8100			1770			2696			2062			2679
8400			1630			2525			1849			2436
8700			1510			2369			1665			2236
9000			1400			2226			1500			2051











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	6000	9000	12000	3726	5628	7736	6000	9000	12000
1800	5735	8658	11717	3503	5291	7273	5735	8658	11717
2100	5448	8224	11063	3326	5024	6905	5448	8224	11063
2400	5211	7866	10516	3180	4803	6601	5211	7866	10516
2700	5010	7564	10046	3057	4617	6345	5010	7564	10046
3000	4837	7303	9639	2951	4455	6125	4837	7303	9639
3300	4686	7074	9280	2859	4315	5933	4686	7074	9280
3600	4552	6872	8960	2777	4194	5762	4552	6872	8960
3900	4432	6657	8674	2704	4081	5611	4432	6657	8674
4200	4324	6416	8414	2638	3982	5474	4324	6416	8414
4500	4226	6199	8178	2578	3892	5350	4226	6199	8178
4800	4118	6003	7961	2524	3810	5237	4118	6003	7961
5100	4000	5841	7762	2474	3734	5133	4000	5841	7762
5400	3891	5691	7578	2428	3665	5037	3891	5691	7578
5700	3791	5553	7398	2385	3600	4948	3791	5553	7398
6000	3699	5424	7223	2322	3528	4865	3699	5424	7223
6300	3613	5304	7061	2259	3432	4788	3613	5304	7061
6600	3533	5192	6910	2201	3343	4687	3533	5192	6910
6900	3455	5088	6768		3259	4571	3455	5088	6768
7200	3382	4988	6634		3182	4462	3382	4988	6634
7500	3314	4890	6508		3108	4360	3314	4890	6508
7800	3249	4795	6390			4264	3249	4795	6390
8100	3189	4706	6278			4173	3189	4706	6278
8400	3131	4621	6172			4087	3131	4621	6172
8700	3077	4541	6071			4006	3077	4541	6071
9000	3025	4464	5980			3929	3025	4464	5980
FBO				700	1050	1400			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
812	No Intermediate Purlins
974	
1137	
1299	
1461	
1624	
1786	
1948	
2111	
2273	
2435	
2598	
2760	
2922	
3085	
3247	
3410	
3572	
3734	
3897	
4059	
4221	
4384	
4546	
4708	
4871	

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	1.00	1.00	1.00
	0.67	0.82	0.85
	0.52	0.72	0.70

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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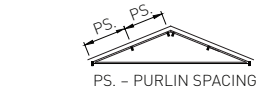
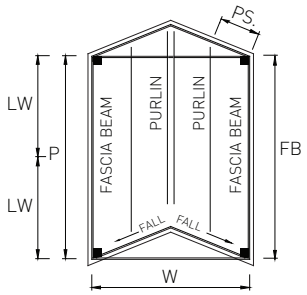
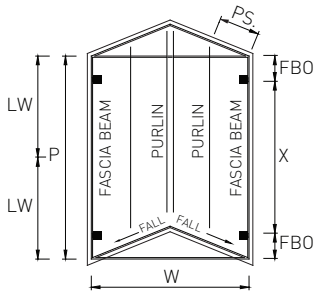
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1200mm

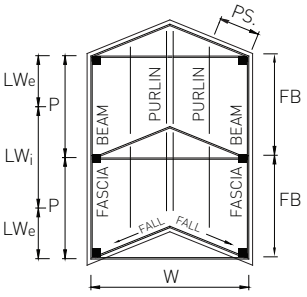
Maximum Load Width of Frames

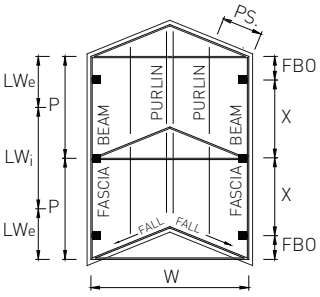
Maximum Allowable Awning Frame Load Width, LW (mm)												
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	10170	15000	15000	12709	15000	15000	15000	15000	15000	15000	15000	15000
1800	7500	15000	15000	9699	15000	15000	15000	15000	15000	15000	15000	15000
2100	5740	11870	15000	7613	14551	15000	14513	15000	15000	14465	15000	15000
2400	4520	9650	14930	4786	9690	14395	11930	15000	15000	11926	15000	15000
2700	3650	7950	12590	3896	8070	12154	9940	15000	15000	9962	15000	15000
3000	3000	6640	10750	3213	6829	10485	8395	15000	15000	8432	15000	15000
3300	2500	5630	9270	2677	5850	9159	7174	14059	15000	7219	14002	15000
3600	2120	4820	8070	2264	5060	8064	6193	12377	15000	6242	12348	15000
3900	1820	4170	7090	1940	4416	7151	5392	10975	15000	5446	10969	15000
4200	1580	3640	6260	1681	3884	6380	4664	9011	13112	4741	9803	14371
4500	1370	3210	5570	1470	3412	5724	4070	7367	10721	4138	8808	13102
4800		2850	5030	1309	3058	5203	3697	6209	9036	3763	7979	12134
5100		2540	4530	1163	2723	4713	3220	5198	7716	3346	7233	11134
5400		2280	4090	1041	2440	4286	2734	4320	6860	2995	6584	10251
5700		2060	3710	937	2199	3913	2383	3728	5956	2695	6016	9472
6000		1870	3380	847	1992	3586	2106	3286	5076	2436	5516	8780
6300		1700	3090	770	1813	3297	2006	2936	4404	2213	5074	8159
6600		1490	2840	703	1657	3040	1915	2629	3821	2018	4660	7598
6900			2610		1520	2811		2371	3343		4268	7090
7200			2430		1410	2616		2117	2944		4026	6678
7500			2250		1303	2432		1875	2595		3729	6257
7800			2090			2266			2313			5873
8100			1950			2112			2062			5522
8400			1820			1969			1849			5082
8700			1640			1840			1665			4602
9000			1430			1723			1500			4155











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)										Purlin Details	
W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Max. Purlin Spacing (mm)	Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	6000	9000	12000	3727	5626	7737	6000	9000	12000	812	0
1800	5735	8658	11717	3505	5290	7275	5735	8658	11717	974	0
2100	5448	8224	11063	3327	5022	6906	5448	8224	11063	1137	0
2400	6000	9000	12000	3182	4802	6602	4996	7543	10084	649	1
2700	6000	9000	12000	3058	4616	6344	4804	7253	9628	730	1
3000	6000	9000	12000	2952	4456	6123	4638	7002	9232	811	1
3300	6000	9000	12000	2860	4316	5931	4493	6783	8884	892	1
3600	5996	9000	12000	2778	4192	5761	4365	6564	8574	974	1
3900	5838	8814	11948	2705	4083	5609	4250	6308	8297	1055	1
4200	5696	8599	11628	2639	3984	5473	4146	6080	8046	1136	1
4500	6000	9000	12000	2580	3893	5349	4804	7253	9628	811	2
4800	6000	9000	12000	2523	3811	5236	4702	7098	9384	865	2
5100	6000	9000	12000	2473	3736	5131	4608	6956	9159	920	2
5400	5996	9000	12000	2427	3666	5035	4521	6825	8950	974	2
5700	5889	8891	12000	2386	3601	4947	4440	6703	8756	1028	2
6000	5789	8740	11838	2325	3524	4863	4365	6564	8574	1082	2
6300	5696	8599	11628	2262	3428	4786	4294	6407	8404	1136	2
6600	5608	8467	11430	2204	3339	4691	4228	6260	8245	1190	2
6900	5960	9000	12000		3255	4574	4493	6922	9105	933	3
7200	5833	9000	12000		3178	4466	4398	6825	8950	974	3
7500	5717	8930	12000		3104	4363	4310	6733	8803	1014	3
7800	5605	8755	11948			4268	4226	6601	8664	1055	3
8100	5501	8593	11785			4177	4148	6479	8531	1095	3
8400	5401	8437	11628			4091	4072	6361	8404	1136	3
8700	5306	8289	11478			4009	4001	6249	8284	1177	3
9000	5563	8690	12000			3933	4195	6552	8950	974	4
FBO				700	1050	1400					

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	1.00	1.00	1.00
	0.69	0.84	0.85
	0.53	0.74	0.69

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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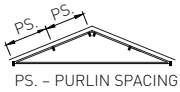
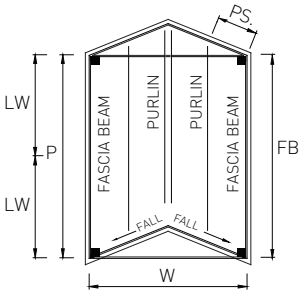
Maximum Load Width of Frames

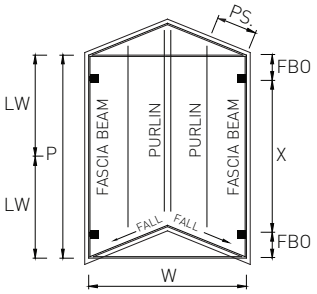
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1800mm

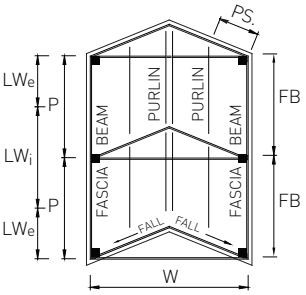
Maximum Allowable Awning Frame Load Width, LW (mm)												
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	10170	15000	15000	12709	15000	15000	15000	15000	15000	15000	15000	15000
1800	7500	15000	15000	9699	15000	15000	15000	15000	15000	15000	15000	15000
2100	5740	11870	15000	7613	14551	15000	14513	15000	15000	14465	15000	15000
2400	4520	9600	14620	6118	12016	15000	11906	15000	15000	11901	15000	15000
2700	3640	7900	12340	5012	10079	14757	9925	15000	15000	9946	15000	15000
3000	3000	6600	10540	4176	8587	12803	7985	15000	15000	8088	15000	15000
3300	2500	5590	9090	3529	7400	11246	6506	13854	15000	6587	13915	15000
3600	2120	4820	8070	2264	5060	8064	6193	12377	15000	6242	12348	15000
3900	1820	4170	7090	1940	4416	7151	5392	10975	15000	5446	10969	15000
4200	1580	3640	6260	1681	3884	6380	4664	9011	13112	4741	9803	14371
4500	1370	3210	5570	1470	3412	5724	4070	7367	10721	4138	8808	13102
4800		2840	4980	1296	3015	5161	3581	6209	9036	3640	7950	11992
5100		2540	4480	1152	2683	4675	3171	5198	7716	3224	7208	11013
5400		2270	4040	1030	2403	4252	2734	4320	6860	2872	6489	10146
5700		2050	3660	926	2163	3882	2383	3728	5956	2573	5809	9375
6000		1860	3340	837	1956	3557	2106	3286	5076	2317	5224	8686
6300		1690	3050	760	1776	3269	2006	2936	4404	2094	4714	8066
6600		1490	2790	693	1620	2998	1868	2629	3821	1898	4266	7507
6900			2570		1483	2742		2371	3343		3869	6843
7200			2410		1399	2607		2117	2944		3921	6629
7500			2230		1293	2423		1875	2595		3613	6209
7800			2070			2247			2313			5826
8100			1930			2089			2062			5475
8400			1800			1946			1849			5082
8700			1640			1815			1665			4602
9000			1430			1697			1500			4155

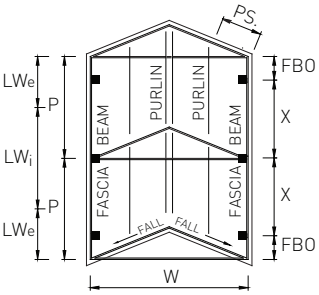


PS. – PURLIN SPACING









Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)										Purlin Details	
W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Max. Purlin Spacing (mm)	Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	6000	9000	12000	3726	5628	7736	6000	9000	12000	812	0
1800	5735	8658	11717	3503	5291	7273	5735	8658	11717	974	0
2100	5448	8224	11063	3326	5024	6905	5448	8224	11063	1137	0
2400	5211	7866	10516	3180	4803	6601	5211	7866	10516	1299	0
2700	5010	7564	10046	3057	4617	6345	5010	7564	10046	1461	0
3000	4837	7303	9639	2951	4455	6125	4837	7303	9639	1624	0
3300	4686	7074	9280	2859	4315	5933	4686	7074	9280	1786	0
3600	5996	9000	12000	2777	4194	5762	4365	6564	8574	974	1
3900	5838	8814	11948	2704	4081	5611	4250	6308	8297	1055	1
4200	5696	8599	11628	2638	3982	5474	4146	6080	8046	1136	1
4500	5566	8403	11334	2578	3892	5350	4033	5886	7817	1217	1
4800	5448	8224	11063	2524	3810	5237	3909	5716	7608	1298	1
5100	5339	8060	10813	2474	3734	5133	3797	5560	7408	1380	1
5400	5238	7908	10579	2428	3665	5037	3694	5417	7214	1461	1
5700	5144	7767	10361	2385	3600	4948	3599	5285	7035	1542	1
6000	5057	7635	10157	2322	3528	4865	3511	5162	6868	1623	1
6300	4976	7512	9966	2259	3432	4788	3426	5047	6713	1704	1
6600	4899	7396	9785	2201	3343	4687	3348	4937	6569	1785	1
6900	2377	8342	11242		3259	4571	3990	6123	8094	1244	2
7200	2327	8224	11063		3182	4462	3906	5996	7952	1298	2
7500	2280	8113	10894		3108	4360	3827	5886	7817	1352	2
7800	2235	7953	10733			4264	3752	5770	7690	1407	2
8100	2193	7805	10579			4173	3682	5662	7569	1461	2
8400	2154	7664	10432			4087	3615	5560	7449	1515	2
8700	2117	7531	10292			4006	3553	5464	7329	1569	2
9000	2081	7405	10157			3929	3493	5372	7214	1623	2
FBO				700	1050	1400					

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	1.00	1.00	1.00
	0.73	0.83	0.85
	0.56	0.73	0.70

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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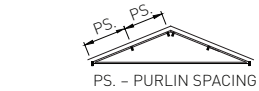
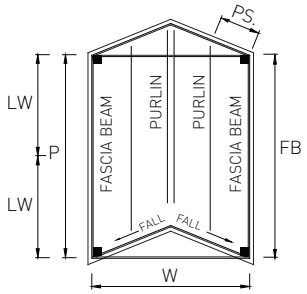
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 2400mm

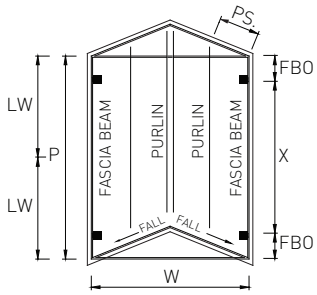
Maximum Load Width of Frames

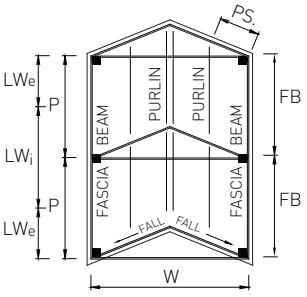
Maximum Allowable Awning Frame Load Width, LW (mm)

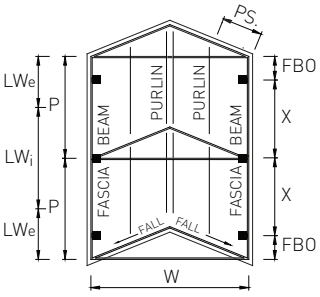
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	10170	15000	15000	12709	15000	15000	15000	15000	15000	15000	15000	15000
1800	7500	15000	15000	9699	15000	15000	15000	15000	15000	15000	15000	15000
2100	5740	11870	15000	7613	14551	15000	14513	15000	15000	14465	15000	15000
2400	4520	9600	14620	6118	12016	15000	11906	15000	15000	11901	15000	15000
2700	3640	7900	12340	5012	10079	14757	9925	15000	15000	9946	15000	15000
3000	3000	6600	10540	4176	8587	12803	7985	15000	15000	8088	15000	15000
3300	2500	5590	9090	3529	7400	11246	6506	13854	15000	6587	13915	15000
3600	2120	4790	7900	3018	6436	9956	5333	11280	15000	5397	11427	15000
3900	1820	4120	6940	2608	5643	8872	4464	9363	15000	4515	9482	15000
4200	1580	3570	6140	2275	4983	7953	3788	7871	13112	3830	7969	13501
4500	1370	3120	5470	1470	3412	5724	3221	6620	10721	3255	6700	11367
4800		2840	4980	1296	3015	5161	3581	6209	9036	3640	7950	11992
5100		2540	4480	1152	2683	4675	3171	5198	7716	3224	7208	11013
5400		2270	4040	1030	2403	4252	2734	4320	6860	2872	6489	10146
5700		2050	3660	926	2163	3882	2383	3728	5956	2573	5809	9375
6000		1860	3340	837	1956	3557	2106	3286	5076	2317	5224	8686
6300		1690	3050	760	1776	3269	2006	2936	4404	2094	4714	8066
6600		1490	2790	693	1620	2998	1868	2629	3821	1898	4266	7507
6900			2570		1483	2742		2371	3343		3869	6843
7200			2370		1362	2517		2117	2944		3513	6196
7500			2190		1255	2317		1875	2595		3202	5641
7800			2040			2139			2313			5190
8100			1900			1979			2062			4781
8400			1770			1836			1849			4409
8700			1640			1707			1665			4069
9000			1430			1591			1500			3756











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Purlin Details: Max. Purlin Spacing (mm)	Purlin Details: Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	6000	9000	12000	3726	5628	7736	6000	9000	12000	812	0
1800	5735	8658	11717	3503	5291	7273	5735	8658	11717	974	0
2100	5448	8224	11063	3326	5024	6905	5448	8224	11063	1137	0
2400	5211	7866	10516	3180	4803	6601	5211	7866	10516	1299	0
2700	5010	7564	10046	3057	4617	6345	5010	7564	10046	1461	0
3000	4837	7303	9639	2951	4455	6125	4837	7303	9639	1624	0
3300	4686	7074	9280	2859	4315	5933	4686	7074	9280	1786	0
3600	4552	6872	8960	2777	4194	5762	4552	6872	8960	1948	0
3900	4432	6657	8674	2704	4081	5611	4432	6657	8674	2111	0
4200	4324	6416	8414	2638	3982	5474	4324	6416	8414	2273	0
4500	5566	8403	11334	2578	3892	5350	4033	5886	7817	1217	1
4800	5448	8224	11063	2524	3810	5237	3909	5716	7608	1298	1
5100	5339	8060	10813	2474	3734	5133	3797	5560	7408	1380	1
5400	5238	7908	10579	2428	3665	5037	3694	5417	7214	1461	1
5700	5144	7767	10361	2385	3600	4948	3599	5285	7035	1542	1
6000	5057	7635	10157	2322	3528	4865	3511	5162	6868	1623	1
6300	4976	7512	9966	2259	3432	4788	3426	5047	6713	1704	1
6600	4899	7396	9785	2201	3343	4687	3348	4937	6569	1785	1
6900	4790	7287	9615		3259	4571	3273	4832	6433	1867	1
7200	4690	7185	9454		3182	4462	3205	4733	6306	1948	1
7500	4595	7088	9301		3108	4360	3140	4640	6187	2029	1
7800	4506	6950	9156			4264	3079	4550	6074	2110	1
8100	4422	6821	9018			4173	3022	4465	5974	2191	1
8400	4341	6696	8886			4087	2967	4384	5893	2273	1
8700	4266	6580	8760			4006	2915	4308	5816	2354	1
9000	2081	3210	10157			3929	3484	5148	7214	1623	2
FBO				700	1050	1400					

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	1.00	1.00	1.00
	0.70	0.83	0.85
	0.54	0.73	0.70

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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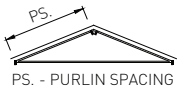
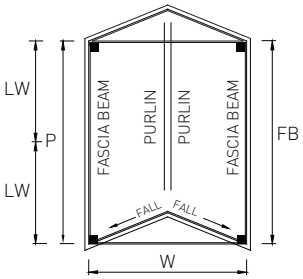
Roof Sheet - Long Spanning
No Intermediate Purlins

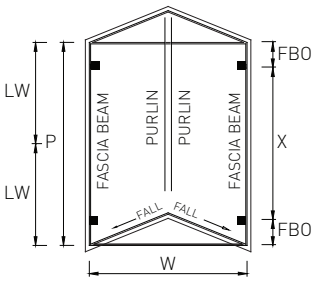
Maximum Load Width of Frames

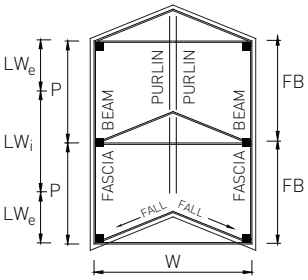
Maximum Allowable Awning Frame Load Width, LW (mm)

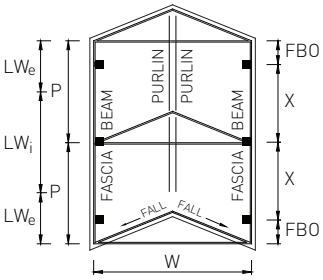
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	9530	15000	15000	11810	15000	15000	15000	15000	15000	15000	15000	15000
1800	7050	13970	15000	9051	15000	15000	15000	15000	15000	15000	15000	15000
2100	5410	11080	15000	7128	13505	15000	15000	15000	15000	15000	15000	15000
2400	4270	8990	13570	5743	11181	15000	13219	15000	15000	13313	15000	15000
2700	3450	7420	11480	4715	9401	13707	10448	15000	15000	10522	15000	15000
3000	2840	6210	9830	3934	8015	11850	8405	14864	15000	8465	15000	15000
3300	2370	5270	8500	3329	6921	10428	6857	11480	15000	6908	14441	15000
3600	2010	4520	7400	2851	6030	9246	5436	8877	12917	5673	11799	15000
3900	1730	3910	6500	2466	5295	8253	4338	7077	10298	4678	9660	15000
4200	1500	3390	5760	2153	4683	7409	3529	5750	8367	3976	8150	13622
4500	1240	2970	5140	1894	4168	6686	2889	4701	6841	3387	6884	11528
4800		2610	4610	1679	3730	6060	2437	3962	5766	2882	5800	9718
5100		2310	4150	1498	3357	5516	2055	3317	4924	2512	5022	8441
5400		2060	3760	1345	3035	5041	1745	2757	4377	2197	4364	7358
5700		1840	3420	1213	2756	4622	1521	2379	3800	1920	3787	6399
6000		1660	3120	1100	2513	4252	1344	2097	3239	1700	3330	5649
6300		1500	2860	1001	2300	3924	1280	1873	2810	1517	2949	5027
6600		1350	2630	916	2112	3630	1222	1677	2438	1352	2609	4466
6900			2420		1945	3237		1513	2133		2327	3988
7200			2220		1769	2842		1351	1878		2101	3587
7500			2050		1538	2479		1197	1656		1895	3222
7800			1900			2249			1476			2900
8100			1760			2035			1316			2642
8400			1630			1838			1180			2405
8700			1500			1653			1062			2186
9000			1390			1482			957			2012











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Purlin Details: Max. Purlin Spacing (mm)	Purlin Details: Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	6000	9000	12000	3825	5774	7940	6000	9000	12000	776	No Intermediate Purlins
1800	5980	9000	12000	3598	5429	7467	5980	9000	12000	932	
2100	5681	8576	11687	3414	5155	7086	5681	8576	11687	1087	
2400	5433	8203	11121	3263	4927	6774	5433	8203	11121	1242	
2700	5224	7887	10635	3138	4737	6512	5224	7887	10635	1398	
3000	5044	7615	10212	3028	4572	6284	5044	7615	10212	1553	
3300	4886	7377	9838	2933	4430	6088	4886	7377	9838	1708	
3600	4747	7166	9506	2848	4301	5912	4747	7166	9506	1863	
3900	4622	6977	9207	2775	4188	5757	4622	6977	9207	2019	
4200	4509	6807	8936	2707	4085	5616	4509	6807	8936	2174	
4500	4406	6652	8688	2646	3994	5487	4406	6652	8688	2329	
4800	4313	6460	8462	2590	3909	5373	4313	6460	8462	2485	
5100	4226	6268	8253	2538	3831	5265	4226	6268	8253	2640	
5400	4147	6092	8060	2490	3759	5165	4147	6092	8060	2795	
5700	4070	5937	7880	2445	3694	5073	4070	5937	7880	2951	
6000	3971	5800	7713	2407	3632	4990	3971	5800	7713	3106	
6300	3879	5673	7556	2364	3574	4910	3879	5673	7556	3261	
6600	3793	5554	7400	2302	3488	4835	3793	5554	7400	3416	
6900	3709	5443	7249		3405	4764	3709	5443	7249	3572	
7200	3631	5338	7107		3323	4665	3631	5338	7107	3727	
7500	3558	5239	6973		3243	4555	3558	5239	6973	3882	
7800	3489	5137	6846			4453	3489	5137	6846	4038	
8100	3424	5041	6726			4362	3424	5041	6726	4193	
8400	3362	4950	6613			4270	3362	4950	6613	4348	
8700	3303	4864	6505			4191	3303	4864	6505	4503	
9000	3248	4783	6402			4109	3248	4783	6402	4659	
FBO				700	1050	1400					

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.94	0.91	1.00
	0.57	0.68	0.70
	0.40	0.57	0.33

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1200mm

Maximum Load Width of Frames

Maximum Allowable Awning Frame Load Width, LW (mm)

W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	9530	15000	15000	11810	15000	15000	15000	15000	15000	15000	15000	15000
1800	7050	13970	15000	9051	15000	15000	15000	15000	15000	15000	15000	15000
2100	5410	11080	15000	7128	13505	15000	15000	15000	15000	15000	15000	15000
2400	4270	9040	13860	4335	9042	13365	13485	15000	15000	13485	15000	15000
2700	3450	7460	11720	3497	7548	11310	11265	15000	15000	11265	15000	15000
3000	2840	6250	10020	2878	6382	9728	9091	14864	15000	9535	15000	15000
3300	2370	5300	8660	2408	5370	8514	7025	11480	15000	8078	15000	15000
3600	2010	4550	7560	2043	4580	7510	5436	8877	12917	6858	13969	15000
3900	1730	3940	6640	1756	3953	6671	4338	7077	10298	5890	12405	15000
4200	1500	3450	5880	1525	3445	5961	3529	5750	8367	5103	11087	15000
4500	1240	3040	5240	1337	3029	5355	2889	4701	6841	4460	9898	14826
4800		2700	4740	1197	2737	4875	2437	3962	5766	4084	9025	13740
5100		2410	4260	1066	2444	4421	2055	3317	4924	3637	8182	12608
5400		2160	3860	955	2195	4009	1745	2757	4377	3260	7388	11609
5700		1950	3510	861	1982	3628	1521	2379	3800	2937	6672	10722
6000		1770	3200	780	1799	3299	1344	2097	3239	2659	6047	9395
6300		1560	2930	709	1640	3012	1280	1873	2810	2417	5502	8349
6600		1360	2690	648	1501	2761	1222	1677	2438	2206	5025	7403
6900			2470		1379	2540		1513	2133		4476	6542
7200			2300		1285	2377		1351	1878		3988	5844
7500			2130		1188	2202		1197	1656		3582	5249
7800			1980			2045			1476			4701
8100			1850			1904			1316			4226
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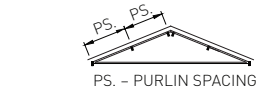

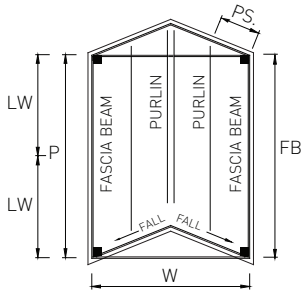

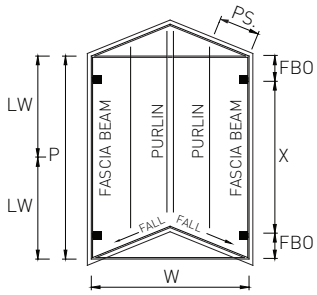

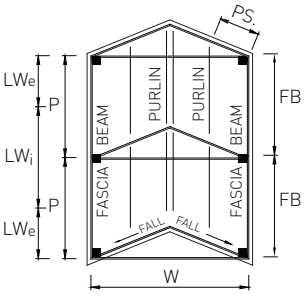

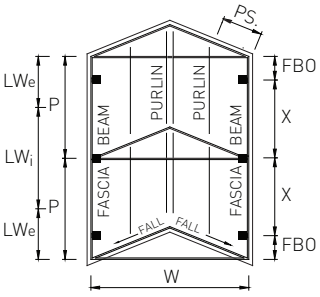

Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	6000	9000	12000	3824	5776	7942	6000	9000	12000
1800	5980	9000	12000	3596	5431	7466	5980	9000	12000
2100	5681	8576	11687	3416	5156	7087	5681	8576	11687
2400	6000	9000	12000	3265	4928	6776	5205	7857	10666
2700	6000	9000	12000	3137	4738	6511	5004	7555	10193
3000	6000	9000	12000	3030	4573	6285	4832	7294	9781
3300	6000	9000	12000	2934	4428	6086	4681	7066	9418
3600	6000	9000	12000	2850	4303	5913	4547	6864	9095
3900	6000	9000	12000	2774	4189	5756	4427	6683	8805
4200	5939	8967	12000	2706	4086	5614	4319	6520	8543
4500	5804	8763	11967	2644	3993	5489	4221	6315	8304
4800	6000	9000	12000	2588	3908	5371	4898	7394	9939
5100	6000	9000	12000	2539	3832	5264	4800	7246	9705
5400	6000	9000	12000	2491	3760	5167	4709	7110	9487
5700	6000	9000	12000	2447	3693	5075	4625	6983	9285
6000	6000	9000	12000	2406	3631	4989	4547	6864	9095
6300	5939	8967	12000	2360	3573	4909	4473	6753	8918
6600	5848	8829	12000	2298	3492	4836	4405	6650	8751
6900	5719	8699	11871		3401	4765	4307	6552	8594
7200	6000	9000	12000		3319	4661	4580	7110	9487
7500	5957	9000	12000		3247	4559	4487	7013	9334
7800	5841	9000	12000			4457	4399	6877	9188
8100	5731	8959	12000			4359	4317	6747	9050
8400	5627	8796	12000			4274	4238	6625	8918
8700	5532	8647	12000			4187	4166	6512	8792
9000	5438	8500	11967			4105	4096	6402	8671
FBO				**700**	**1050**	**1400**			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	0
932	0
1087	0
621	1
698	1
776	1
854	1
931	1
1009	1
1087	1
1164	1
828	2
879	2
931	2
983	2
1035	2
1087	2
1138	2
1190	2
931	3
970	3
1009	3
1048	3
1087	3
1125	3
1164	3

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.97	0.93	1.00
	0.54	0.71	0.70
	0.37	0.59	0.33

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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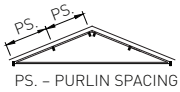
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1800mm

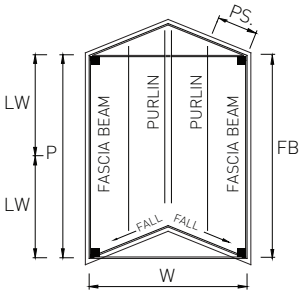
Maximum Load Width of Frames

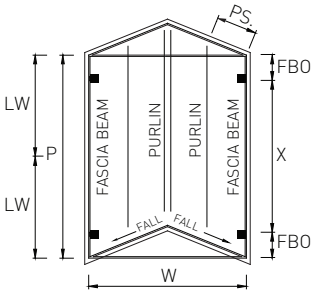
Maximum Allowable Awning Frame Load Width, LW (mm)

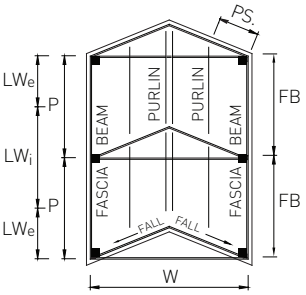
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	9530	15000	15000	11810	15000	15000	15000	15000	15000	15000	15000	15000
1800	7050	13970	15000	9051	15000	15000	15000	15000	15000	15000	15000	15000
2100	5410	11080	15000	7128	13505	15000	15000	15000	15000	15000	15000	15000
2400	4270	8990	13570	5743	11181	15000	13219	15000	15000	13313	15000	15000
2700	3450	7420	11480	4715	9401	13707	10448	15000	15000	10522	15000	15000
3000	2840	6210	9830	3934	8015	11850	8405	14864	15000	8465	15000	15000
3300	2370	5270	8500	3329	6921	10428	6857	11480	15000	6908	14441	15000
3600	2010	4550	7560	2043	4580	7510	5436	8877	12917	6858	13969	15000
3900	1730	3940	6640	1756	3953	6671	4338	7077	10298	5890	12405	15000
4200	1500	3450	5880	1525	3445	5961	3529	5750	8367	5103	11087	15000
4500	1240	3040	5240	1337	3029	5355	2889	4701	6841	4460	9898	14826
4800		2690	4690	1181	2684	4835	2437	3962	5766	3928	8726	13571
5100		2400	4220	1051	2394	4338	2055	3317	4924	3482	7740	12465
5400		2160	3810	941	2149	3901	1745	2757	4377	3104	6901	11484
5700		1950	3460	847	1939	3525	1521	2379	3800	2781	6182	10611
6000		1760	3150	767	1756	3195	1344	2097	3239	2504	5563	9395
6300		1560	2880	697	1597	2905	1280	1873	2810	2264	5024	8349
6600		1360	2650	636	1458	2652	1222	1677	2438	2054	4550	7403
6900			2440		1336	2429		1513	2133		4130	6542
7200			2290		1271	2344		1351	1878		3988	5844
7500			2120		1176	2170		1197	1656		3582	5249
7800			1960			2015			1476			4701
8100			1830			1875			1316			4226
8400			1710			1750			1180			3848
8700			1540			1636			1062			3497
9000			1390			1531			957			3170

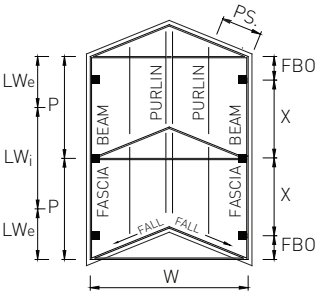


PS. – PURLIN SPACING









Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	6000	9000	12000	3824	5776	7942	6000	9000	12000
1800	5980	9000	12000	3596	5431	7466	5980	9000	12000
2100	5681	8576	11687	3416	5156	7087	5681	8576	11687
2400	5433	8203	11121	3265	4928	6776	5433	8203	11121
2700	5224	7887	10635	3137	4738	6511	5224	7887	10635
3000	5044	7615	10212	3030	4573	6285	5044	7615	10212
3300	4886	7377	9838	2934	4428	6086	4886	7377	9838
3600	6000	9000	12000	2850	4303	5913	4547	6864	9095
3900	6000	9000	12000	2774	4189	5756	4427	6683	8805
4200	5939	8967	12000	2706	4086	5614	4319	6520	8543
4500	5804	8763	11967	2644	3993	5489	4221	6315	8304
4800	5681	8576	11687	2588	3908	5371	4131	6115	8085
5100	5567	8405	11428	2539	3832	5264	4048	5939	7883
5400	5462	8246	11187	2491	3760	5167	3961	5788	7697
5700	5365	8099	10961	2447	3693	5075	3860	5647	7523
6000	5274	7961	10750	2406	3631	4989	3765	5517	7349
6300	5188	7833	10552	2360	3573	4909	3678	5395	7184
6600	5109	7713	10364	2298	3492	4836	3596	5281	7030
6900	4997	7599	10187		3401	4765	3518	5175	6886
7200	2427	8576	11687		3319	4661	4194	6444	8445
7500	2377	8460	11512		3247	4559	4109	6315	8304
7800	2332	8298	11346			4457	4031	6194	8170
8100	2288	8142	11187			4359	3955	6077	8043
8400	2247	7995	11035			4274	3883	5967	7922
8700	2207	7855	10889			4187	3815	5863	7807
9000	2171	7725	10750			4105	3752	5766	7697
FBO				700	1050	1400			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	0
932	0
1087	0
1242	0
1398	0
1553	0
1708	0
931	1
1009	1
1087	1
1164	1
1242	1
1319	1
1397	1
1475	1
1552	1
1630	1
1708	1
1785	1
1242	2
1294	2
1345	2
1397	2
1449	2
1501	2
1552	2

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	1.00	0.93	1.00
	0.57	0.69	0.70
	0.40	0.58	0.33

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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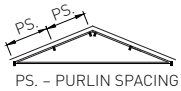
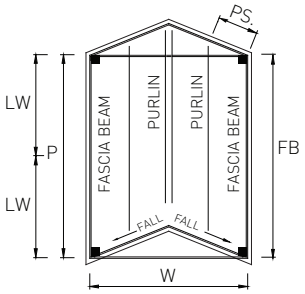
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 2400mm

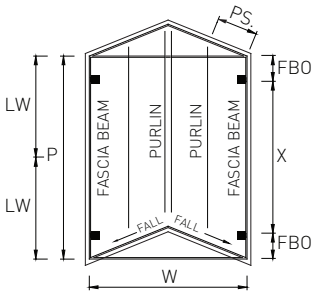
Maximum Load Width of Frames

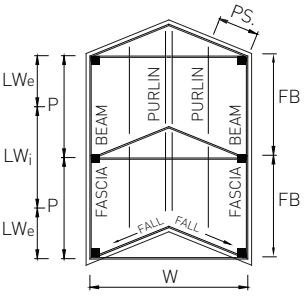
Maximum Allowable Awning Frame Load Width, LW (mm)												
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	9530	15000	15000	11810	15000	15000	15000	15000	15000	15000	15000	15000
1800	7050	13970	15000	9051	15000	15000	15000	15000	15000	15000	15000	15000
2100	5410	11080	15000	7128	13505	15000	15000	15000	15000	15000	15000	15000
2400	4270	8990	13570	5743	11181	15000	13219	15000	15000	13313	15000	15000
2700	3450	7420	11480	4715	9401	13707	10448	15000	15000	10522	15000	15000
3000	2840	6210	9830	3934	8015	11850	8405	14864	15000	8465	15000	15000
3300	2370	5270	8500	3329	6921	10428	6857	11480	15000	6908	14441	15000
3600	2010	4520	7400	2851	6030	9246	5436	8877	12917	5673	11799	15000
3900	1730	3910	6500	2466	5295	8253	4338	7077	10298	4678	9660	15000
4200	1500	3390	5760	2153	4683	7409	3529	5750	8367	3976	8150	13622
4500	1240	2970	5140	1894	4168	6686	2889	4701	6841	3387	6884	11528
4800		2690	4690	1181	2684	4835	2437	3962	5766	3928	8726	13571
5100		2400	4220	1051	2394	4338	2055	3317	4924	3482	7740	12465
5400		2160	3810	941	2149	3901	1745	2757	4377	3104	6901	11484
5700		1950	3460	847	1939	3525	1521	2379	3800	2781	6182	10611
6000		1760	3150	767	1756	3195	1344	2097	3239	2504	5563	9395
6300		1560	2880	697	1597	2905	1280	1873	2810	2264	5024	8349
6600		1360	2650	636	1458	2652	1222	1677	2438	2054	4550	7403
6900			2440		1336	2429		1513	2133		4130	6542
7200			2250		1228	2232		1351	1878		3754	5844
7500			2080		1133	2056		1197	1656		3416	5249
7800			1930			1900			1476			4701
8100			1800			1759			1316			4226
8400			1680			1632			1180			3848
8700			1540			1517			1062			3497
9000			1390			1415			957			3170

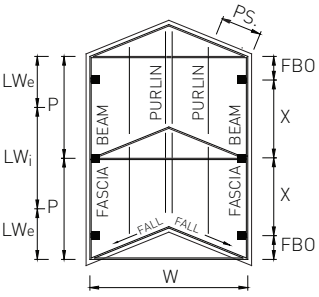


PS. – PURLIN SPACING









Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)										Purlin Details	
W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Max. Purlin Spacing (mm)	Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	6000	9000	12000	3825	5774	7940	6000	9000	12000	776	0
1800	5980	9000	12000	3598	5429	7467	5980	9000	12000	932	0
2100	5681	8576	11687	3414	5155	7086	5681	8576	11687	1087	0
2400	5433	8203	11121	3263	4927	6774	5433	8203	11121	1242	0
2700	5224	7887	10635	3138	4737	6512	5224	7887	10635	1398	0
3000	5044	7615	10212	3028	4572	6284	5044	7615	10212	1553	0
3300	4886	7377	9838	2933	4430	6088	4886	7377	9838	1708	0
3600	4747	7166	9506	2848	4301	5912	4747	7166	9506	1863	0
3900	4622	6977	9207	2775	4188	5757	4622	6977	9207	2019	0
4200	4509	6807	8936	2707	4085	5616	4509	6807	8936	2174	0
4500	4406	6652	8688	2646	3994	5487	4406	6652	8688	2329	0
4800	5681	8576	11687	2590	3909	5373	4131	6115	8085	1242	1
5100	5567	8405	11428	2538	3831	5265	4048	5939	7883	1319	1
5400	5462	8246	11187	2490	3759	5165	3961	5788	7697	1397	1
5700	5365	8099	10961	2445	3694	5073	3860	5647	7523	1475	1
6000	5274	7961	10750	2407	3632	4990	3765	5517	7349	1552	1
6300	5188	7833	10552	2364	3574	4910	3678	5395	7184	1630	1
6600	5109	7713	10364	2302	3488	4835	3596	5281	7030	1708	1
6900	4997	7599	10187		3405	4764	3518	5175	6886	1785	1
7200	4892	7492	10020		3323	4665	3443	5075	6750	1863	1
7500	4792	7391	9861		3243	4555	3374	4979	6622	1941	1
7800	4700	7248	9709			4453	3309	4883	6502	2018	1
8100	4612	7112	9565			4362	3246	4791	6388	2096	1
8400	4528	6984	9428			4270	3188	4705	6280	2174	1
8700	4450	6863	9297			4191	3133	4624	6177	2251	1
9000	4375	6747	9171			4109	3080	4545	6080	2329	1
FBO				700	1050	1400					

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.97	0.91	1.00
	0.57	0.69	0.70
	0.40	0.58	0.33

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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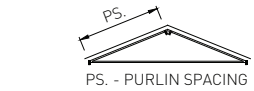
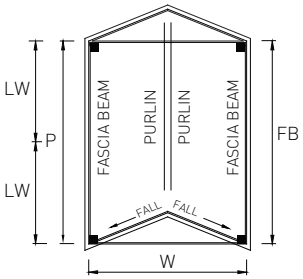
Roof Sheet - Long Spanning
No Intermediate Purlins

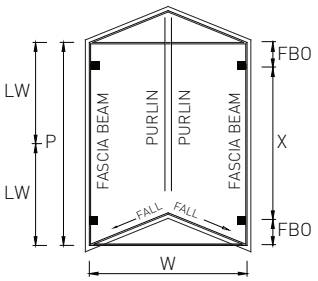
Maximum Load Width of Frames

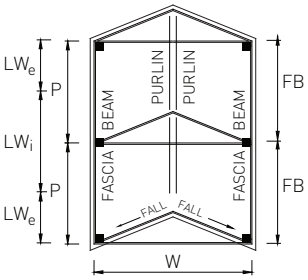
Maximum Allowable Awning Frame Load Width, LW (mm)

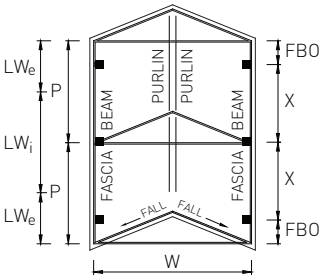
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	8950	15000	15000	11176	15000	15000	15000	15000	15000	15000	15000	15000
1800	6600	13190	15000	8528	15000	15000	15000	15000	15000	15000	15000	15000
2100	5050	10440	15000	6695	12795	15000	12697	15000	15000	12648	15000	15000
2400	3970	8440	12860	5380	10566	15000	10416	15000	15000	10406	15000	15000
2700	3200	6950	10850	4407	8862	12976	8683	15000	15000	8696	15000	15000
3000	2630	5800	9270	3672	7551	11258	6986	13989	15000	7072	13896	15000
3300	2200	4910	7990	3103	6507	9889	5691	12120	15000	5760	12167	15000
3600	1870	4210	6950	2653	5659	8754	4666	9868	15000	4719	9991	15000
3900	1600	3620	6100	2293	4962	7801	3905	8191	13769	3948	8291	13652
4200	1390	3140	5400	2000	4382	6993	3314	6886	11471	3349	6968	11805
4500	1210	2740	4810	1759	3895	6301	2818	5792	9379	2846	5859	9939
4800		2410	4310	1558	3483	5704	2429	4948	7905	2452	5004	8511
5100		2130	3880	1389	3131	5186	2119	4283	6751	2138	4331	7393
5400		1890	3510	1246	2828	4733	1850	3707	6002	1866	3748	6415
5700		1680	3180	1124	2566	4336	1629	3239	5210	1643	3274	5624
6000		1500	2900	1019	2338	3985	1450	2859	4441	1462	2889	4989
6300		1340	2660	927	2138	3673	1291	2522	3853	1301	2548	4421
6600		1210	2440	848	1962	3395	1156	2243	3343	1164	2266	3935
6900			2220		1807	3146		2020	2925		2040	3528
7200			2020		1669	2922		1818	2575		1836	3160
7500			1840		1545	2720		1641	2270		1659	2842
7800			1690			2537			2024			2581
8100			1550			2371			1804			2342
8400			1430			2220			1618			2130
8700			1330			2083			1456			1955
9000			1230			1958			1312			1793











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5847	8827	11913	3579	5406	7433	5847	8827	11913
1800	5502	8307	11135	3368	5082	6989	5502	8307	11135
2100	5227	7891	10502	3197	4825	6634	5227	7891	10502
2400	4999	7547	9971	3056	4614	6343	4999	7547	9971
2700	4807	7257	9518	2939	4437	6098	4807	7257	9518
3000	4641	7006	9126	2836	4283	5887	4641	7006	9126
3300	4496	6757	8781	2749	4148	5702	4496	6757	8781
3600	4367	6471	8474	2669	4031	5538	4367	6471	8474
3900	4252	6218	8198	2599	3924	5394	4252	6218	8198
4200	4111	5994	7950	2537	3830	5262	4111	5994	7950
4500	3977	5809	7724	2481	3742	5142	3977	5809	7724
4800	3856	5641	7517	2427	3665	5035	3856	5641	7517
5100	3745	5488	7310	2380	3593	4934	3745	5488	7310
5400	3643	5346	7118	2308	3500	4843	3643	5346	7118
5700	3549	5215	6941	2235	3392	4756	3549	5215	6941
6000	3461	5094	6776	2173	3299	4625	3461	5094	6776
6300	3377	4980	6623	2117	3205	4505	3377	4980	6623
6600	3300	4869	6480	2057	3126	4386	3300	4869	6480
6900	3227	4765	6347		3042	4274	3227	4765	6347
7200	3159	4667	6222		2974	4169	3159	4667	6222
7500	3095	4576	6104		2900	4077	3095	4576	6104
7800	3035	4487	5994			3984	3035	4487	5994
8100	2979	4403	5910			3902	2979	4403	5910
8400	2925	4324	5830			3817	2925	4324	5830
8700	2874	4248	5753			3745	2874	4248	5753
9000	2826	4177	5679			3668	2826	4177	5679
FBO				700	1050	1366			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
812	No Intermediate Purlins
974	
1137	
1299	
1461	
1624	
1786	
1948	
2111	
2273	
2435	
2598	
2760	
2922	
3085	
3247	
3410	
3572	
3734	
3897	
4059	
4221	
4384	
4546	
4708	
4871	

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	1.00	1.00	1.00
	0.64	0.81	0.77
	0.50	0.71	0.62

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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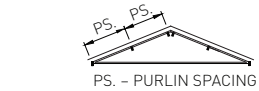
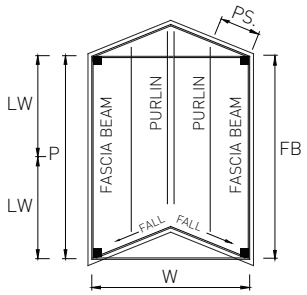
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1200mm

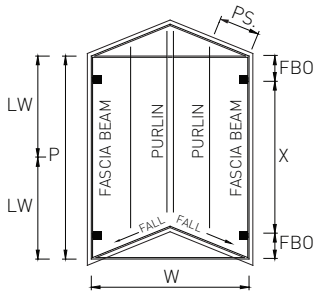
Maximum Load Width of Frames

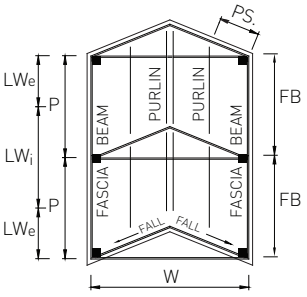
Maximum Allowable Awning Frame Load Width, LW (mm)

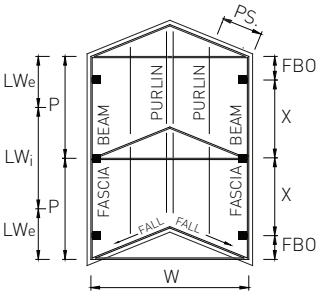
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	8950	15000	15000	11176	15000	15000	15000	15000	15000	15000	15000	15000
1800	6600	13190	15000	8528	15000	15000	15000	15000	15000	15000	15000	15000
2100	5050	10440	15000	6695	12795	15000	12697	15000	15000	12648	15000	15000
2400	3980	8490	13130	4208	8521	12658	10437	15000	15000	10428	15000	15000
2700	3210	6990	11070	3426	7096	10687	8696	15000	15000	8711	15000	15000
3000	2630	5840	9450	2825	6005	9220	7345	14084	15000	7373	13992	15000
3300	2200	4950	8150	2354	5144	8053	6276	12300	15000	6312	12243	15000
3600	1870	4240	7100	1991	4450	7091	5418	10828	15000	5458	10797	15000
3900	1600	3670	6230	1706	3883	6288	4717	9602	13992	4762	9591	13844
4200	1390	3200	5510	1478	3415	5610	4080	7884	11471	4145	8572	12566
4500	1210	2820	4900	1292	3000	5033	3561	6445	9379	3618	7701	11456
4800		2510	4420	1151	2689	4575	3235	5432	7905	3290	6977	10609
5100		2240	3980	1023	2394	4144	2817	4547	6751	2926	6325	9735
5400		2010	3600	915	2146	3769	2392	3779	6002	2619	5757	8963
5700		1810	3270	824	1934	3441	2085	3261	5210	2356	5260	8282
6000		1640	2970	745	1752	3153	1843	2875	4441	2130	4823	7677
6300		1490	2720	677	1594	2899	1755	2568	3853	1935	4436	7134
6600		1340	2500	618	1457	2673	1675	2300	3343	1765	4075	6643
6900			2300		1337	2472		2074	2925		3732	6199
7200			2140		1240	2300		1852	2575		3520	5840
7500			1980		1145	2138		1641	2270		3260	5471
7800			1840			1992			2024			5135
8100			1710			1857			1804			4828
8400			1600			1731			1618			4443
8700			1490			1618			1456			4024
9000			1360			1515			1312			3633











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Purlin Details: Max. Purlin Spacing (mm)	Purlin Details: Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	5847	8827	11913	3580	5406	7433	5847	8827	11913	812	0
1800	5502	8307	11135	3366	5082	6989	5502	8307	11135	974	0
2100	5227	7891	10502	3196	4825	6634	5227	7891	10502	1137	0
2400	6000	9000	12000	3058	4614	6343	4801	7247	9564	649	1
2700	6000	9000	12000	2938	4437	6098	4616	6968	9125	730	1
3000	6000	9000	12000	2837	4283	5887	4456	6723	8744	811	1
3300	5922	8941	12000	2747	4148	5702	4317	6411	8409	892	1
3600	5753	8685	11702	2670	4031	5538	4194	6140	8112	974	1
3900	5601	8456	11360	2601	3924	5394	4050	5909	7846	1055	1
4200	5465	8250	11049	2536	3830	5262	3908	5713	7605	1136	1
4500	6000	9000	12000	2480	3742	5142	4616	6968	9125	811	2
4800	5983	9000	12000	2428	3665	5035	4518	6820	8890	865	2
5100	5863	8852	11949	2378	3593	4934	4427	6657	8673	920	2
5400	5753	8685	11702	2305	3500	4843	4344	6470	8473	974	2
5700	5650	8530	11470	2238	3392	4756	4266	6298	8286	1028	2
6000	5554	8385	11253	2177	3299	4625	4194	6140	8112	1082	2
6300	5465	8250	11049	2113	3205	4505	4111	5993	7949	1136	2
6600	5381	8123	10856	2061	3126	4386	4020	5868	7796	1190	2
6900	5718	8809	11886		3042	4274	4272	6609	8622	933	3
7200	5596	8685	11702		2974	4169	4181	6470	8473	974	3
7500	5485	8568	11527		2900	4077	4098	6340	8331	1014	3
7800	5377	8400	11360			3984	4017	6215	8197	1055	3
8100	5278	8245	11201			3902	3943	6101	8070	1095	3
8400	5182	8095	11049			3817	3872	5990	7949	1136	3
8700	5091	7952	10903			3745	3803	5885	7833	1177	3
9000	5338	8338	11702			3668	3988	6170	8473	974	4
FBO				700	1050	1366					

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	1.00	1.00	1.00
	0.67	0.82	0.77
	0.52	0.72	0.62

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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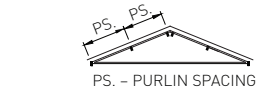
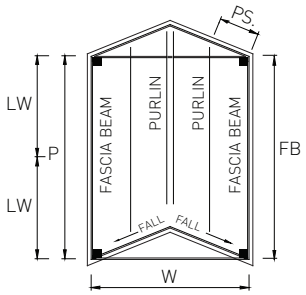
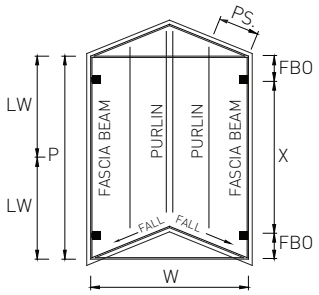
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1800mm

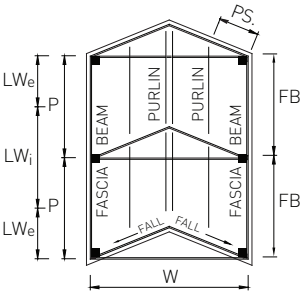
Maximum Load Width of Frames

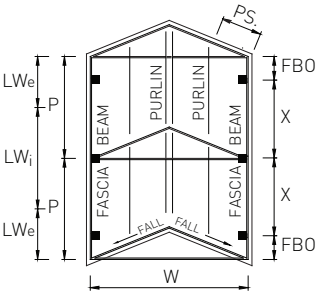
Maximum Allowable Awning Frame Load Width, LW (mm)												
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	8950	15000	15000	11176	15000	15000	15000	15000	15000	15000	15000	15000
1800	6600	13190	15000	8528	15000	15000	15000	15000	15000	15000	15000	15000
2100	5050	10440	15000	6695	12795	15000	12697	15000	15000	12648	15000	15000
2400	3970	8440	12860	5380	10566	15000	10416	15000	15000	10406	15000	15000
2700	3200	6950	10850	4407	8862	12976	8683	15000	15000	8696	15000	15000
3000	2630	5800	9270	3672	7551	11258	6986	13989	15000	7072	13896	15000
3300	2200	4910	7990	3103	6507	9889	5691	12120	15000	5760	12167	15000
3600	1870	4240	7100	1991	4450	7091	5418	10828	15000	5458	10797	15000
3900	1600	3670	6230	1706	3883	6288	4717	9602	13992	4762	9591	13844
4200	1390	3200	5510	1478	3415	5610	4080	7884	11471	4145	8572	12566
4500	1210	2820	4900	1292	3000	5033	3561	6445	9379	3618	7701	11456
4800		2500	4380	1140	2651	4538	3132	5432	7905	3183	6952	10485
5100		2230	3940	1013	2359	4110	2774	4547	6751	2819	6302	9630
5400		2000	3550	906	2113	3739	2392	3779	6002	2511	5674	8871
5700		1800	3220	814	1902	3414	2085	3261	5210	2250	5079	8197
6000		1630	2930	736	1720	3128	1843	2875	4441	2026	4568	7595
6300		1490	2680	668	1562	2875	1755	2568	3853	1831	4122	7053
6600		1340	2460	609	1424	2636	1634	2300	3343	1660	3730	6564
6900			2260		1304	2411		2074	2925		3383	5983
7200			2120		1230	2292		1852	2575		3428	5796
7500			1960		1137	2131		1641	2270		3160	5429
7800			1820			1976			2024			5094
8100			1690			1837			1804			4787
8400			1580			1711			1618			4443
8700			1480			1596			1456			4024
9000			1360			1492			1312			3633











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)										Purlin Details	
W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Max. Purlin Spacing (mm)	Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	5847	8827	11913	3580	5406	7432	5847	8827	11913	812	0
1800	5502	8307	11135	3366	5082	6987	5502	8307	11135	974	0
2100	5227	7891	10502	3196	4825	6636	5227	7891	10502	1137	0
2400	4999	7547	9971	3058	4614	6342	4999	7547	9971	1299	0
2700	4807	7257	9518	2938	4437	6097	4807	7257	9518	1461	0
3000	4641	7006	9126	2837	4283	5885	4641	7006	9126	1624	0
3300	4496	6757	8781	2747	4148	5700	4496	6757	8781	1786	0
3600	5753	8685	11702	2670	4031	5539	4194	6140	8112	974	1
3900	5601	8456	11360	2601	3924	5393	4050	5909	7846	1055	1
4200	5465	8250	11049	2536	3830	5261	3908	5713	7605	1136	1
4500	5340	8062	10764	2480	3742	5143	3780	5537	7376	1217	1
4800	5227	7891	10502	2428	3665	5034	3664	5376	7158	1298	1
5100	5122	7733	10259	2378	3593	4935	3559	5229	6959	1380	1
5400	5026	7587	10033	2305	3500	4841	3460	5093	6775	1461	1
5700	4936	7452	9822	2238	3392	4757	3368	4966	6606	1542	1
6000	4852	7325	9625	2177	3299	4629	3283	4844	6449	1623	1
6300	4774	7207	9441	2113	3205	4501	3204	4731	6304	1704	1
6600	4700	7096	9267	2061	3122	4383	3130	4625	6168	1785	1
6900	2281	8004	10674		3046	4278	3730	5751	7652	1244	2
7200	2233	7891	10502		2970	4173	3652	5641	7516	1298	2
7500	2188	7784	10338		2903	4073	3578	5537	7376	1352	2
7800	2144	7631	10182			3988	3508	5428	7243	1407	2
8100	2104	7488	10033			3898	3442	5326	7117	1461	2
8400	2067	7354	9891			3821	3380	5231	6997	1515	2
8700	2031	7226	9755			3741	3322	5140	6884	1569	2
9000	1997	7105	9625			3672	3266	5053	6775	1623	2
FBO				700	1050	1364					

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	1.00	1.00	1.00
	0.70	0.81	0.77
	0.54	0.72	0.62

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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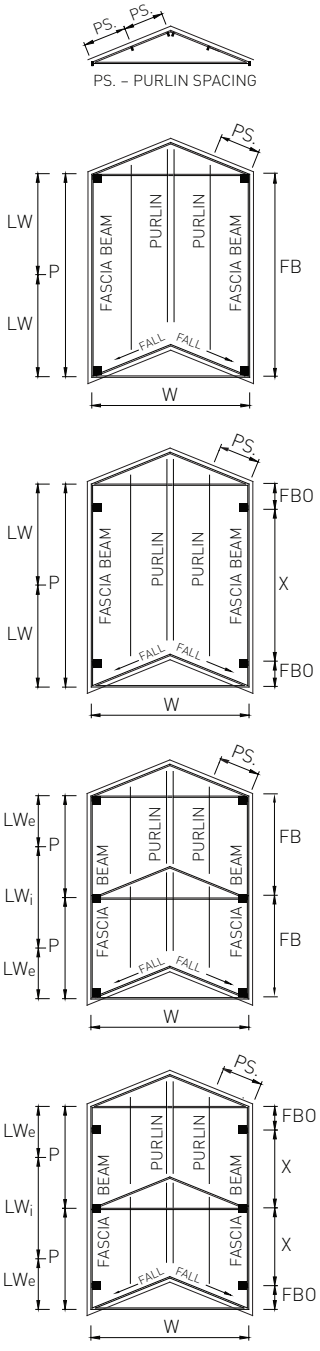
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 2400mm

Maximum Load Width of Frames

Maximum Allowable Awning Frame Load Width, LW (mm)

W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	8950	15000	15000	11176	15000	15000	15000	15000	15000	15000	15000	15000
1800	6600	13190	15000	8528	15000	15000	15000	15000	15000	15000	15000	15000
2100	5050	10440	15000	6695	12795	15000	12697	15000	15000	12648	15000	15000
2400	3970	8440	12860	5380	10566	15000	10416	15000	15000	10406	15000	15000
2700	3200	6950	10850	4407	8862	12976	8683	15000	15000	8696	15000	15000
3000	2630	5800	9270	3672	7551	11258	6986	13989	15000	7072	13896	15000
3300	2200	4910	7990	3103	6507	9889	5691	12120	15000	5760	12167	15000
3600	1870	4210	6950	2653	5659	8754	4666	9868	15000	4719	9991	15000
3900	1600	3620	6100	2293	4962	7801	3905	8191	13769	3948	8291	13652
4200	1390	3140	5400	2000	4382	6993	3314	6886	11471	3349	6968	11805
4500	1210	2740	4810	1292	3000	5033	2818	5792	9379	2846	5859	9939
4800		2500	4380	1140	2651	4538	3132	5432	7905	3183	6952	10485
5100		2230	3940	1013	2359	4110	2774	4547	6751	2819	6302	9630
5400		2000	3550	906	2113	3739	2392	3779	6002	2511	5674	8871
5700		1800	3220	814	1902	3414	2085	3261	5210	2250	5079	8197
6000		1630	2930	736	1720	3128	1843	2875	4441	2026	4568	7595
6300		1490	2680	668	1562	2875	1755	2568	3853	1831	4122	7053
6600		1340	2460	609	1424	2636	1634	2300	3343	1660	3730	6564
6900			2260		1304	2411		2074	2925		3383	5983
7200			2080		1198	2213		1852	2575		3072	5418
7500			1930		1104	2037		1641	2270		2800	4933
7800			1790			1881			2024			4538
8100			1670			1740			1804			4180
8400			1560			1614			1618			3855
8700			1460			1501			1456			3558
9000			1360			1399			1312			3284



Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5847	8827	11913	3579	5405	7432	5847	8827	11913
1800	5502	8307	11135	3368	5083	6987	5502	8307	11135
2100	5227	7891	10502	3197	4827	6636	5227	7891	10502
2400	4999	7547	9971	3056	4615	6342	4999	7547	9971
2700	4807	7257	9518	2939	4436	6097	4807	7257	9518
3000	4641	7006	9126	2836	4282	5885	4641	7006	9126
3300	4496	6757	8781	2749	4150	5700	4496	6757	8781
3600	4367	6471	8474	2669	4030	5539	4367	6471	8474
3900	4252	6218	8198	2599	3926	5393	4252	6218	8198
4200	4111	5994	7950	2537	3829	5261	4111	5994	7950
4500	5340	8062	10764	2481	3744	5143	3780	5537	7376
4800	5227	7891	10502	2427	3663	5034	3664	5376	7158
5100	5122	7733	10259	2380	3592	4935	3559	5229	6959
5400	5026	7587	10033	2308	3504	4841	3460	5093	6775
5700	4936	7452	9822	2235	3395	4757	3368	4966	6606
6000	4852	7325	9625	2173	3295	4629	3283	4844	6449
6300	4774	7207	9441	2117	3209	4501	3204	4731	6304
6600	4700	7096	9267	2057	3122	4383	3130	4625	6168
6900	4596	6992	9103		3046	4278	3060	4526	6040
7200	4499	6893	8948		2970	4173	2996	4434	5937
7500	4409	6777	8801		2903	4073	2936	4346	5847
7800	4323	6645	8661			3988	2879	4262	5761
8100	4243	6521	8529			3898	2825	4183	5679
8400	4165	6403	8402			3821	2774	4107	5601
8700	4093	6291	8281			3741	2726	4035	5526
9000	1997	3069	9625			3672	3257	4822	6775
FBO				700	1050	1364			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
812	0
974	0
1137	0
1299	0
1461	0
1624	0
1786	0
1948	0
2111	0
2273	0
1217	1
1298	1
1380	1
1461	1
1542	1
1623	1
1704	1
1785	1
1867	1
1948	1
2029	1
2110	1
2191	1
2273	1
2354	1
1623	2

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	1.00	1.00	1.00
	0.67	0.81	0.77
	0.52	0.71	0.62

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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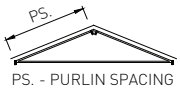
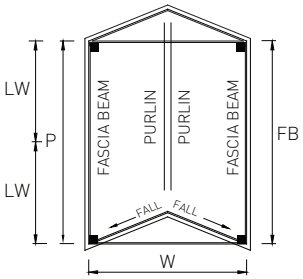
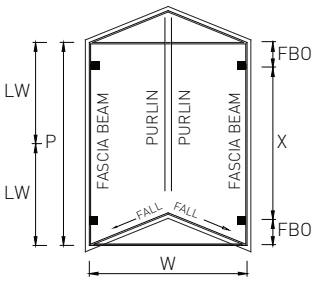
Maximum Load Width of Frames

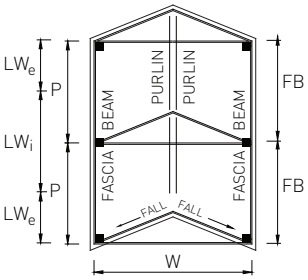
Roof Sheet - Long Spanning
No Intermediate Purlins

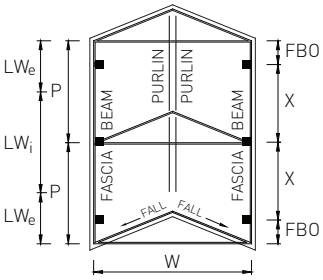
Maximum Allowable Awning Frame Load Width, LW (mm)												
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	8400	15000	15000	10413	15000	15000	15000	15000	15000	15000	15000	15000
1800	6220	12310	15000	7981	14665	15000	15000	15000	15000	15000	15000	15000
2100	4770	9770	14330	6285	11908	15000	14420	15000	15000	14420	15000	15000
2400	3760	7930	11960	5064	9859	14211	11656	15000	15000	11738	15000	15000
2700	3040	6540	10120	4157	8289	12086	9213	15000	15000	9278	15000	15000
3000	2500	5480	8660	3469	7067	10449	7411	13106	15000	7464	15000	15000
3300	2090	4640	7490	2936	6103	9194	6046	10122	14602	6091	12733	15000
3600	1770	3980	6530	2513	5317	8153	4794	7827	11390	5002	10404	15000
3900	1520	3450	5730	2174	4669	7277	3825	6240	9080	4125	8517	14191
4200	1320	2990	5080	1898	4129	6533	3112	5070	7378	3506	7186	12011
4500	1160	2620	4530	1670	3675	5895	2547	4145	6032	2987	6070	10165
4800		2300	4060	1481	3289	5344	2149	3493	5084	2542	5114	8569
5100		2040	3660	1321	2960	4864	1812	2924	4342	2215	4428	7443
5400		1820	3310	1186	2676	4444	1539	2431	3860	1937	3848	6488
5700		1620	3010	1070	2430	4075	1341	2097	3351	1693	3339	5642
6000		1460	2750	970	2216	3749	1185	1849	2856	1499	2936	4981
6300		1320	2520	883	2028	3460	1129	1652	2478	1337	2600	4432
6600		1190	2310	807	1862	3201	1077	1479	2150	1192	2300	3938
6900			2130		1715	2854		1334	1881		2052	3516
7200			1960		1560	2506		1191	1656		1852	3163
7500			1810		1356	2185		1055	1460		1671	2841
7800			1670			1983			1301			2557
8100			1550			1795			1160			2330
8400			1430			1620			1040			2120
8700			1320			1458			937			1927
9000			1230			1306			844			1774











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)										Purlin Details	
W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Max. Purlin Spacing (mm)	Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	6000	9000	12000	3735	5640	7755	6000	9000	12000	776	No Intermediate Purlins
1800	5836	8810	11795	3514	5302	7290	5836	8810	11795	932	
2100	5544	8369	11139	3333	5034	6921	5544	8369	11139	1087	
2400	5302	8005	10589	3187	4813	6616	5302	8005	10589	1242	
2700	5098	7696	10117	3066	4626	6360	5098	7696	10117	1398	
3000	4922	7431	9708	2960	4466	6138	4922	7431	9708	1553	
3300	4768	7199	9347	2865	4326	5946	4768	7199	9347	1708	
3600	4632	6990	9026	2783	4204	5775	4632	6990	9026	1863	
3900	4510	6717	8738	2712	4091	5623	4510	6717	8738	2019	
4200	4400	6474	8477	2646	3992	5486	4400	6474	8477	2174	
4500	4285	6255	8239	2584	3901	5361	4285	6255	8239	2329	
4800	4154	6057	8021	2529	3819	5248	4154	6057	8021	2485	
5100	4035	5888	7821	2479	3743	5143	4035	5888	7821	2640	
5400	3925	5738	7635	2433	3673	5047	3925	5738	7635	2795	
5700	3824	5598	7460	2390	3608	4958	3824	5598	7460	2951	
6000	3731	5469	7284	2339	3538	4874	3731	5469	7284	3106	
6300	3644	5348	7121	2268	3442	4797	3644	5348	7121	3261	
6600	3563	5236	6968	2209	3352	4707	3563	5236	6968	3416	
6900	3485	5130	6825		3267	4589	3485	5130	6825	3572	
7200	3412	5030	6690		3190	4480	3412	5030	6690	3727	
7500	3343	4933	6563		3116	4377	3343	4933	6563	3882	
7800	3278	4838	6444			4281	3278	4838	6444	4038	
8100	3217	4747	6331			4189	3217	4747	6331	4193	
8400	3159	4662	6224			4102	3159	4662	6224	4348	
8700	3104	4581	6123			4021	3104	4581	6123	4503	
9000	3052	4504	6026			3943	3052	4504	6026	4659	
FBO				700	1050	1400					

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.90	0.90	0.95
	0.55	0.67	0.60
	0.39	0.56	0.27

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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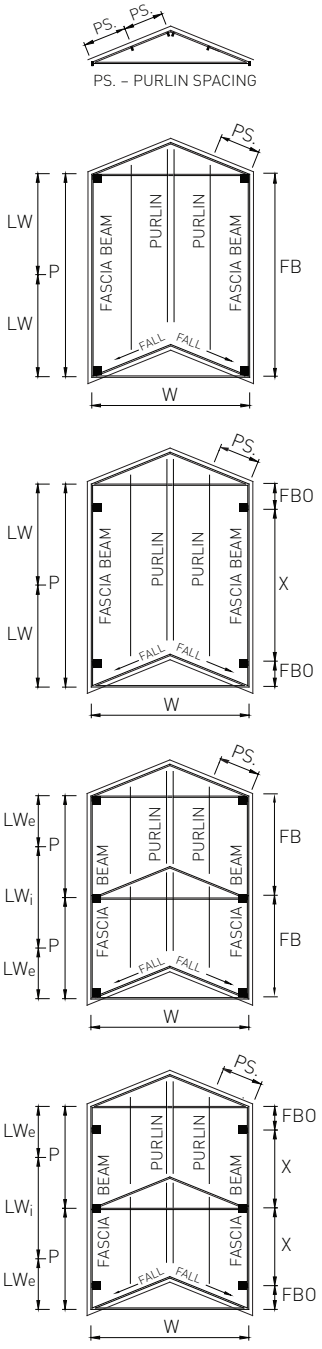
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1200mm

Maximum Load Width of Frames

Maximum Allowable Awning Frame Load Width, LW (mm)

W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	8400	15000	15000	10413	15000	15000	15000	15000	15000	15000	15000	15000
1800	6220	12310	15000	7981	14665	15000	15000	15000	15000	15000	15000	15000
2100	4770	9770	14330	6285	11908	15000	14420	15000	15000	14420	15000	15000
2400	3770	7970	12220	3822	7973	11785	11890	15000	15000	11890	15000	15000
2700	3040	6580	10330	3083	6655	9972	9933	15000	15000	9933	15000	15000
3000	2500	5510	8840	2538	5628	8578	8016	13106	15000	8407	15000	15000
3300	2090	4670	7640	2123	4735	7507	6194	10122	14602	7123	13966	15000
3600	1770	4010	6660	1802	4039	6622	4794	7827	11390	6047	12317	15000
3900	1520	3480	5860	1548	3485	5882	3825	6240	9080	5194	10938	15000
4200	1320	3040	5190	1345	3038	5256	3112	5070	7378	4500	9776	14337
4500	1160	2680	4620	1178	2671	4722	2547	4145	6032	3933	8727	13072
4800		2380	4180	1056	2413	4298	2149	3493	5084	3601	7958	12115
5100		2120	3760	940	2155	3898	1812	2924	4342	3207	7214	11117
5400		1910	3400	842	1935	3535	1539	2431	3860	2874	6514	10236
5700		1720	3090	759	1748	3199	1341	2097	3351	2590	5883	9454
6000		1560	2820	687	1586	2909	1185	1849	2856	2344	5332	8284
6300		1420	2580	626	1446	2656	1129	1652	2478	2131	4851	7362
6600		1260	2370	572	1324	2435	1077	1479	2150	1945	4431	6528
6900			2180		1216	2240		1334	1881		3947	5768
7200			2030		1133	2096		1191	1656		3517	5153
7500			1880		1048	1941		1055	1460		3158	4628
7800			1750			1803			1301			4145
8100			1630			1679			1160			3726
8400			1520			1567			1040			3393
8700			1420			1466			937			3084
9000			1290			1375			844			2796



Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	6000	9000	12000	3736	5641	7756	6000	9000	12000
1800	5836	8810	11795	3513	5304	7292	5836	8810	11795
2100	5544	8369	11139	3335	5035	6922	5544	8369	11139
2400	6000	9000	12000	3189	4814	6618	5084	7675	10157
2700	6000	9000	12000	3065	4627	6361	4888	7379	9699
3000	6000	9000	12000	2959	4467	6140	4719	7125	9301
3300	6000	9000	12000	2866	4327	5947	4572	6902	8951
3600	6000	9000	12000	2784	4203	5776	4441	6625	8640
3900	5941	8969	12000	2711	4093	5624	4324	6367	8360
4200	5796	8750	11706	2645	3993	5487	4206	6136	8108
4500	5664	8551	11411	2585	3903	5363	4069	5935	7878
4800	6000	9000	12000	2531	3820	5249	4784	7222	9454
5100	6000	9000	12000	2481	3745	5145	4688	7078	9227
5400	6000	9000	12000	2434	3675	5048	4600	6944	9018
5700	5992	9000	12000	2391	3610	4959	4518	6797	8822
6000	5891	8893	11917	2335	3542	4876	4441	6625	8640
6300	5796	8750	11706	2272	3446	4798	4369	6466	8469
6600	5707	8615	11506	2213	3356	4711	4302	6318	8308
6900	5581	8489	11318		3271	4593	4207	6180	8157
7200	5934	9000	12000		3194	4484	4473	6944	9018
7500	5813	9000	12000		3119	4381	4382	6842	8870
7800	5700	8909	12000			4285	4297	6708	8729
8100	5593	8742	11863			4192	4216	6582	8596
8400	5491	8584	11706			4106	4140	6463	8469
8700	5398	8438	11555			4024	4069	6353	8347
9000	5307	8295	11411			3947	4001	6246	8231
FBO				700	1050	1400			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	0
932	0
1087	0
621	1
698	1
776	1
854	1
931	1
1009	1
1087	1
1164	1
828	2
879	2
931	2
983	2
1035	2
1087	2
1138	2
1190	2
931	3
970	3
1009	3
1048	3
1087	3
1125	3
1164	3

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.93	0.91	0.95
	0.52	0.69	0.60
	0.36	0.57	0.28

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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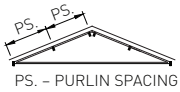
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1800mm

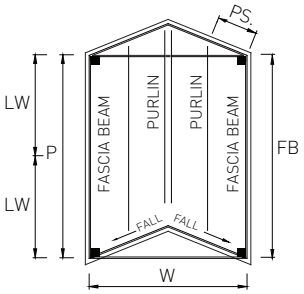
Maximum Load Width of Frames

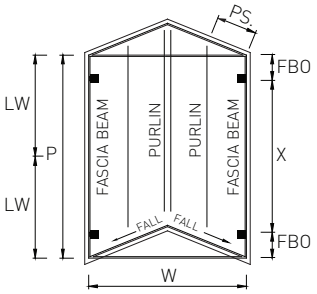
Maximum Allowable Awning Frame Load Width, LW (mm)

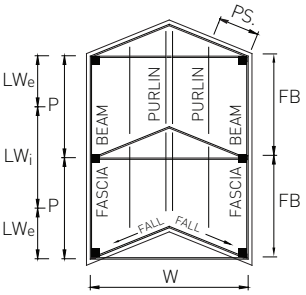
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	8400	15000	15000	10413	15000	15000	15000	15000	15000	15000	15000	15000
1800	6220	12310	15000	7981	14665	15000	15000	15000	15000	15000	15000	15000
2100	4770	9770	14330	6285	11908	15000	14420	15000	15000	14420	15000	15000
2400	3760	7930	11960	5064	9859	14211	11656	15000	15000	11738	15000	15000
2700	3040	6540	10120	4157	8289	12086	9213	15000	15000	9278	15000	15000
3000	2500	5480	8660	3469	7067	10449	7411	13106	15000	7464	15000	15000
3300	2090	4640	7490	2936	6103	9194	6046	10122	14602	6091	12733	15000
3600	1770	4010	6660	1802	4039	6622	4794	7827	11390	6047	12317	15000
3900	1520	3480	5860	1548	3485	5882	3825	6240	9080	5194	10938	15000
4200	1320	3040	5190	1345	3038	5256	3112	5070	7378	4500	9776	14337
4500	1160	2680	4620	1178	2671	4722	2547	4145	6032	3933	8727	13072
4800		2370	4140	1041	2367	4263	2149	3493	5084	3463	7694	11966
5100		2120	3720	927	2111	3825	1812	2924	4342	3070	6824	10991
5400		1900	3360	830	1895	3439	1539	2431	3860	2737	6085	10126
5700		1720	3050	747	1710	3109	1341	2097	3351	2452	5451	9356
6000		1560	2780	676	1549	2817	1185	1849	2856	2208	4905	8284
6300		1420	2540	614	1408	2562	1129	1652	2478	1997	4430	7362
6600		1260	2330	560	1286	2338	1077	1479	2150	1811	4012	6528
6900			2150		1178	2142		1334	1881		3642	5768
7200			2010		1121	2067		1191	1656		3517	5153
7500			1870		1037	1914		1055	1460		3158	4628
7800			1730			1777			1301			4145
8100			1610			1654			1160			3726
8400			1500			1543			1040			3393
8700			1400			1443			937			3084
9000			1290			1350			844			2796

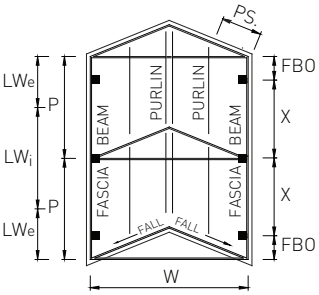


PS. – PURLIN SPACING









Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	6000	9000	12000	3735	5640	7755	6000	9000	12000
1800	5836	8810	11795	3514	5302	7290	5836	8810	11795
2100	5544	8369	11139	3333	5034	6921	5544	8369	11139
2400	5302	8005	10589	3187	4813	6616	5302	8005	10589
2700	5098	7696	10117	3066	4626	6360	5098	7696	10117
3000	4922	7431	9708	2960	4466	6138	4922	7431	9708
3300	4768	7199	9347	2865	4326	5946	4768	7199	9347
3600	6000	9000	12000	2783	4204	5775	4441	6625	8640
3900	5941	8969	12000	2712	4091	5623	4324	6367	8360
4200	5796	8750	11706	2646	3992	5486	4206	6136	8108
4500	5664	8551	11411	2584	3901	5361	4069	5935	7878
4800	5544	8369	11139	2529	3819	5248	3944	5764	7668
5100	5433	8202	10887	2479	3743	5143	3831	5608	7472
5400	5330	8047	10652	2433	3673	5047	3727	5463	7276
5700	5235	7903	10434	2390	3608	4958	3631	5330	7096
6000	5146	7769	10229	2339	3538	4874	3542	5206	6928
6300	5063	7644	10036	2268	3442	4797	3458	5091	6772
6600	4985	7526	9855	2209	3352	4707	3379	4982	6626
6900	4877	7415	9684		3267	4589	3305	4876	6489
7200	2368	8369	11139		3190	4480	3941	6051	8014
7500	2320	8256	10969		3116	4377	3861	5935	7878
7800	2275	8098	10807			4281	3787	5822	7750
8100	2233	7946	10652			4189	3716	5712	7628
8400	2192	7802	10505			4102	3648	5609	7512
8700	2154	7666	10364			4021	3585	5511	7392
9000	2118	7539	10229			3943	3525	5420	7276
FBO				**700**	**1050**	**1400**			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	0
932	0
1087	0
1242	0
1398	0
1553	0
1708	0
931	1
1009	1
1087	1
1164	1
1242	1
1319	1
1397	1
1475	1
1552	1
1630	1
1708	1
1785	1
1242	2
1294	2
1345	2
1397	2
1449	2
1501	2
1552	2

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.97	0.91	0.95
	0.55	0.68	0.60
	0.38	0.57	0.27

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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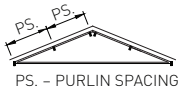
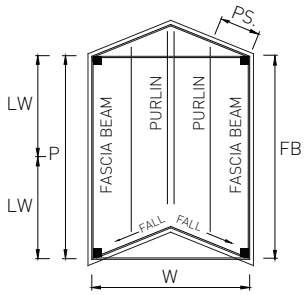
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 2400mm

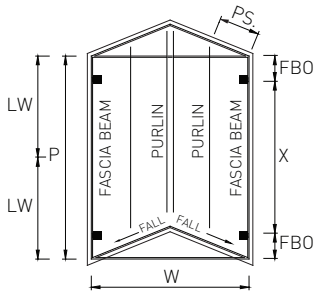
Maximum Load Width of Frames

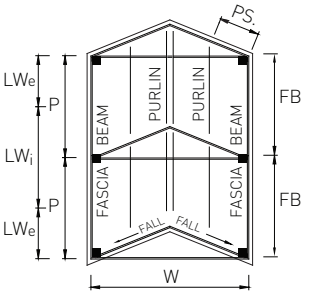
Maximum Allowable Awning Frame Load Width, LW (mm)

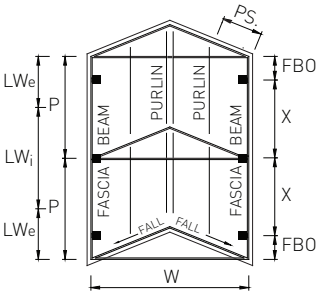
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	8400	15000	15000	10413	15000	15000	15000	15000	15000	15000	15000	15000
1800	6220	12310	15000	7981	14665	15000	15000	15000	15000	15000	15000	15000
2100	4770	9770	14330	6285	11908	15000	14420	15000	15000	14420	15000	15000
2400	3760	7930	11960	5064	9859	14211	11656	15000	15000	11738	15000	15000
2700	3040	6540	10120	4157	8289	12086	9213	15000	15000	9278	15000	15000
3000	2500	5480	8660	3469	7067	10449	7411	13106	15000	7464	15000	15000
3300	2090	4640	7490	2936	6103	9194	6046	10122	14602	6091	12733	15000
3600	1770	3980	6530	2513	5317	8153	4794	7827	11390	5002	10404	15000
3900	1520	3450	5730	2174	4669	7277	3825	6240	9080	4125	8517	14191
4200	1320	2990	5080	1898	4129	6533	3112	5070	7378	3506	7186	12011
4500	1160	2620	4530	1670	3675	5895	2547	4145	6032	2987	6070	10165
4800		2370	4140	1041	2367	4263	2149	3493	5084	3463	7694	11966
5100		2120	3720	927	2111	3825	1812	2924	4342	3070	6824	10991
5400		1900	3360	830	1895	3439	1539	2431	3860	2737	6085	10126
5700		1720	3050	747	1710	3109	1341	2097	3351	2452	5451	9356
6000		1560	2780	676	1549	2817	1185	1849	2856	2208	4905	8284
6300		1420	2540	614	1408	2562	1129	1652	2478	1997	4430	7362
6600		1260	2330	560	1286	2338	1077	1479	2150	1811	4012	6528
6900			2150		1178	2142		1334	1881		3642	5768
7200			1980		1083	1968		1191	1656		3310	5153
7500			1830		999	1813		1055	1460		3012	4628
7800			1700			1675			1301			4145
8100			1590			1551			1160			3726
8400			1480			1439			1040			3393
8700			1390			1338			937			3084
9000			1290			1247			844			2796











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	6000	9000	12000	3736	5641	7756	6000	9000	12000
1800	5836	8810	11795	3513	5304	7292	5836	8810	11795
2100	5544	8369	11139	3335	5035	6922	5544	8369	11139
2400	5302	8005	10589	3189	4814	6618	5302	8005	10589
2700	5098	7696	10117	3065	4627	6361	5098	7696	10117
3000	4922	7431	9708	2959	4467	6140	4922	7431	9708
3300	4768	7199	9347	2866	4327	5947	4768	7199	9347
3600	4632	6990	9026	2784	4203	5776	4632	6990	9026
3900	4510	6717	8738	2711	4093	5624	4510	6717	8738
4200	4400	6474	8477	2645	3993	5487	4400	6474	8477
4500	4285	6255	8239	2585	3903	5363	4285	6255	8239
4800	5544	8369	11139	2531	3820	5249	3944	5764	7668
5100	5433	8202	10887	2481	3745	5145	3831	5608	7472
5400	5330	8047	10652	2434	3675	5048	3727	5463	7276
5700	5235	7903	10434	2391	3610	4959	3631	5330	7096
6000	5146	7769	10229	2335	3542	4876	3542	5206	6928
6300	5063	7644	10036	2272	3446	4798	3458	5091	6772
6600	4985	7526	9855	2213	3356	4711	3379	4982	6626
6900	4877	7415	9684		3271	4593	3305	4876	6489
7200	4773	7311	9522		3194	4484	3235	4776	6361
7500	4676	7212	9368		3119	4381	3170	4682	6241
7800	4586	7073	9222			4285	3108	4592	6127
8100	4500	6940	9083			4192	3050	4506	6019
8400	4419	6815	8951			4106	2995	4424	5934
8700	4342	6697	8825			4024	2943	4348	5857
9000	4269	6584	8704			3947	2893	4274	5782
FBO				700	1050	1400			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	0
932	0
1087	0
1242	0
1398	0
1553	0
1708	0
1863	0
2019	0
2174	0
2329	0
1242	1
1319	1
1397	1
1475	1
1552	1
1630	1
1708	1
1785	1
1863	1
1941	1
2018	1
2096	1
2174	1
2251	1
2329	1

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.93	0.90	0.95
	0.55	0.68	0.60
	0.38	0.57	0.28

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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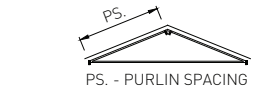
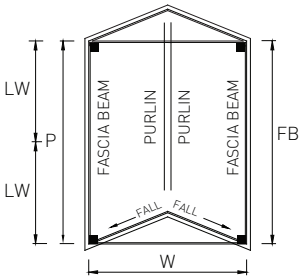
Roof Sheet - Long Spanning
No Intermediate Purlins

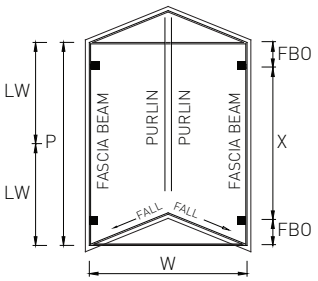
Maximum Load Width of Frames

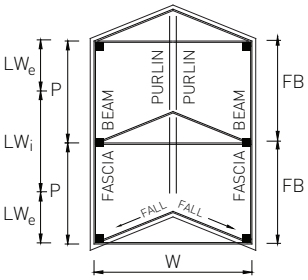
Maximum Allowable Awning Frame Load Width, LW (mm)

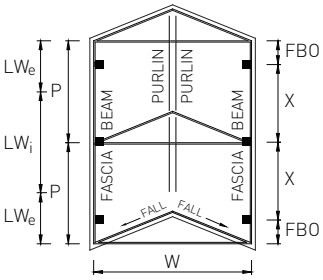
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	7880	15000	15000	9845	15000	15000	15000	15000	15000	15000	15000	15000
1800	5810	11620	15000	7513	13922	15000	13846	15000	15000	13743	15000	15000
2100	4450	9190	13610	5898	11272	15000	11136	15000	15000	11088	15000	15000
2400	3500	7430	11330	4739	9308	13469	9136	15000	15000	9123	15000	15000
2700	2820	6120	9560	3883	7807	11431	7616	14170	15000	7624	14040	15000
3000	2320	5110	8160	3235	6652	9918	6127	12269	15000	6200	12183	15000
3300	1940	4330	7040	2734	5732	8712	4992	10631	14982	5049	10667	14779
3600	1640	3710	6120	2338	4985	7712	4092	8655	13415	4137	8759	13253
3900	1410	3190	5370	2020	4371	6873	3425	7184	12077	3461	7268	11968
4200	1220	2770	4760	1762	3860	6160	2906	6039	10061	2936	6109	10349
4500	1070	2420	4230	1549	3431	5551	2471	5080	8226	2495	5136	8713
4800		2120	3790	1373	3068	5025	2130	4340	6933	2150	4387	7462
5100		1880	3410	1224	2758	4569	1858	3756	5921	1875	3797	6481
5400		1670	3090	1098	2491	4170	1622	3252	5264	1636	3286	5624
5700		1480	2800	990	2261	3820	1429	2841	4570	1440	2870	4931
6000		1320	2560	897	2060	3511	1272	2507	3895	1282	2533	4373
6300		1180	2340	817	1884	3236	1133	2212	3379	1141	2234	3876
6600		1070	2150	747	1729	2991	1014	1968	2932	1021	1987	3450
6900			1960		1592	2771		1772	2565		1789	3093
7200			1780		1470	2574		1595	2259		1610	2771
7500			1620		1361	2396		1439	1991		1454	2492
7800			1490			2235			1775			2263
8100			1370			2089			1582			2053
8400			1260			1956			1419			1868
8700			1170			1835			1277			1714
9000			1080			1725			1151			1572











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5696	8599	11339	3489	5270	7246	5696	8599	11339
1800	5360	8092	10583	3282	4957	6813	5360	8092	10583
2100	5092	7687	9970	3117	4706	6467	5092	7687	9970
2400	4870	7352	9457	2981	4498	6184	4870	7352	9457
2700	4682	6986	9021	2865	4325	5944	4682	6986	9021
3000	4521	6629	8643	2765	4177	5740	4521	6629	8643
3300	4329	6321	8311	2681	4046	5561	4329	6321	8311
3600	4152	6054	8017	2604	3930	5400	4152	6054	8017
3900	3995	5834	7753	2537	3827	5259	3995	5834	7753
4200	3855	5640	7515	2474	3736	5131	3855	5640	7515
4500	3729	5466	7280	2420	3651	5015	3729	5466	7280
4800	3614	5307	7065	2363	3574	4912	3614	5307	7065
5100	3510	5161	6867	2282	3468	4814	3510	5161	6867
5400	3412	5027	6686	2214	3352	4705	3412	5027	6686
5700	3321	4899	6519	2145	3251	4568	3321	4899	6519
6000	3237	4778	6364	2080	3157	4432	3237	4778	6364
6300	3159	4666	6220	2028	3070	4313	3159	4666	6220
6600	3086	4562	6086	1972	2988	4202	3086	4562	6086
6900	3018	4465	5969		2918	4097	3018	4465	5969
7200	2955	4373	5874		2846	3999	2955	4373	5874
7500	2895	4287	5785		2777	3906	2895	4287	5785
7800	2839	4204	5699			3819	2839	4204	5699
8100	2786	4125	5618			3735	2786	4125	5618
8400	2735	4051	5540			3656	2735	4051	5540
8700	2688	3980	5466			3581	2688	3980	5466
9000	2643	3913	5394			3509	2643	3913	5394
FBO				700	1036	1233			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
812	No Intermediate Purlins
974	
1137	
1299	
1461	
1624	
1786	
1948	
2111	
2273	
2435	
2598	
2760	
2922	
3085	
3247	
3410	
3572	
3734	
3897	
4059	
4221	
4384	
4546	
4708	
4871	

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.97	1.00	1.00
	0.62	0.80	0.74
	0.48	0.70	0.39

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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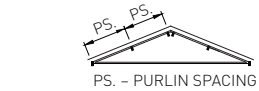
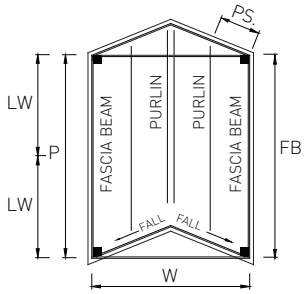
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1200mm

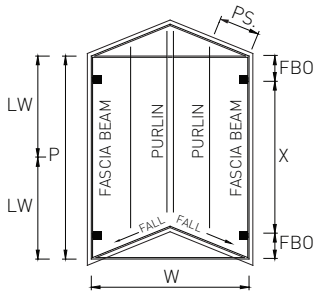
Maximum Load Width of Frames

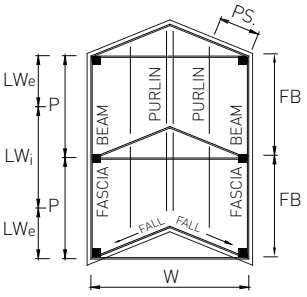
Maximum Allowable Awning Frame Load Width, LW (mm)

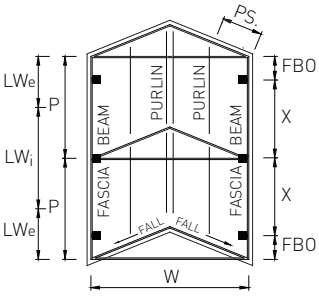
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	7880	15000	15000	9845	15000	15000	15000	15000	15000	15000	15000	15000
1800	5810	11620	15000	7513	13922	15000	13846	15000	15000	13743	15000	15000
2100	4450	9190	13610	5898	11272	15000	11136	15000	15000	11088	15000	15000
2400	3500	7480	11570	3707	7507	11151	9154	15000	15000	9142	15000	15000
2700	2820	6150	9750	3018	6251	9415	7627	14278	15000	7637	14150	15000
3000	2320	5140	8320	2489	5290	8122	6442	12353	15000	6464	12267	15000
3300	1940	4360	7180	2073	4531	7095	5505	10788	15000	5534	10733	15000
3600	1640	3730	6250	1754	3920	6247	4752	9497	13621	4785	9466	13452
3900	1410	3230	5490	1503	3421	5539	4137	8422	12272	4175	8409	12137
4200	1220	2820	4850	1302	3009	4942	3578	6915	10061	3634	7515	11016
4500	1070	2480	4310	1139	2643	4434	3123	5653	8226	3172	6752	10044
4800		2210	3900	1014	2369	4030	2837	4764	6933	2884	6116	9301
5100		1970	3510	901	2109	3651	2471	3988	5921	2565	5545	8535
5400		1770	3170	806	1890	3320	2098	3315	5264	2296	5047	7858
5700		1590	2880	726	1704	3032	1829	2860	4570	2066	4612	7261
6000		1450	2620	656	1543	2778	1616	2522	3895	1868	4228	6731
6300		1320	2400	597	1404	2554	1539	2253	3379	1696	3889	6254
6600		1200	2200	545	1283	2355	1469	2017	2932	1547	3572	5824
6900			2020		1177	2178		1819	2565		3271	5435
7200			1880		1092	2026		1624	2259		3086	5120
7500			1740		1009	1884		1439	1991		2858	4796
7800			1620			1755			1775			4502
8100			1510			1636			1582			4233
8400			1410			1525			1419			3896
8700			1310			1425			1277			3528
9000			1230			1335			1151			3185











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5696	8599	11339	3489	5270	7246	5696	8599	11339
1800	5360	8092	10583	3282	4957	6813	5360	8092	10583
2100	5092	7687	9970	3117	4706	6467	5092	7687	9970
2400	6000	9000	12000	2981	4498	6184	4680	7036	9073
2700	6000	9000	12000	2865	4325	5944	4500	6635	8650
3000	5955	8990	11911	2765	4177	5740	4312	6296	8283
3300	5769	8709	11501	2681	4046	5561	4119	6004	7962
3600	5604	8460	11133	2604	3930	5400	3950	5772	7677
3900	5456	8238	10802	2537	3827	5259	3801	5565	7415
4200	5323	8037	10500	2474	3736	5131	3667	5380	7164
4500	5955	8990	11911	2420	3651	5015	4500	6635	8650
4800	5828	8799	11632	2363	3574	4912	4397	6425	8424
5100	5712	8623	11374	2282	3468	4814	4271	6234	8216
5400	5604	8460	11133	2214	3352	4705	4155	6059	8023
5700	5504	8309	10908	2145	3251	4568	4049	5908	7844
6000	5411	8168	10698	2080	3157	4432	3950	5772	7677
6300	5323	8037	10500	2028	3070	4313	3858	5645	7521
6600	5241	7913	10313	1972	2988	4202	3773	5527	7363
6900	5570	8581	11312		2918	4097	4009	6189	8166
7200	5452	8460	11133		2846	3999	3924	6059	8023
7500	5343	8346	10963		2777	3906	3846	5943	7888
7800	5238	8182	10802			3819	3770	5826	7759
8100	5142	8031	10647			3735	3701	5719	7637
8400	5048	7885	10500			3656	3634	5615	7521
8700	4959	7746	10359			3581	3570	5516	7402
9000	5200	8122	11133			3509	3743	5784	8023
FBO				700	1036	1233			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
812	0
974	0
1137	0
649	1
730	1
811	1
892	1
974	1
1055	1
1136	1
811	2
865	2
920	2
974	2
1028	2
1082	2
1136	2
1190	2
933	3
974	3
1014	3
1055	3
1095	3
1136	3
1177	3
974	4

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	1.00	1.00	1.00
	0.65	0.81	0.74
	0.50	0.71	0.39

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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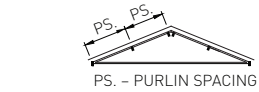
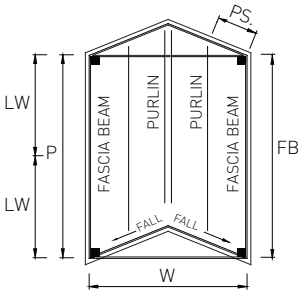
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1800mm

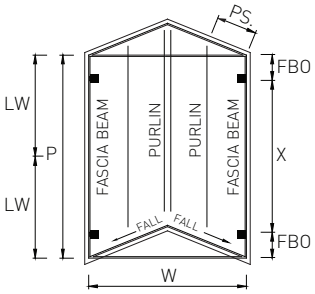
Maximum Load Width of Frames

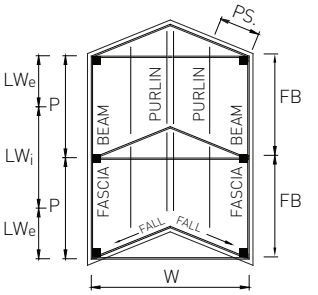
Maximum Allowable Awning Frame Load Width, LW (mm)

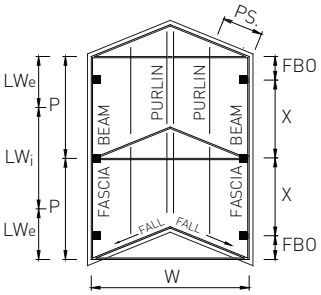
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	7880	15000	15000	9845	15000	15000	15000	15000	15000	15000	15000	15000
1800	5810	11620	15000	7513	13922	15000	13846	15000	15000	13743	15000	15000
2100	4450	9190	13610	5898	11272	15000	11136	15000	15000	11088	15000	15000
2400	3500	7430	11330	4739	9308	13469	9136	15000	15000	9123	15000	15000
2700	2820	6120	9560	3883	7807	11431	7616	14170	15000	7624	14040	15000
3000	2320	5110	8160	3235	6652	9918	6127	12269	15000	6200	12183	15000
3300	1940	4330	7040	2734	5732	8712	4992	10631	14982	5049	10667	14779
3600	1640	3730	6250	1754	3920	6247	4752	9497	13621	4785	9466	13452
3900	1410	3230	5490	1503	3421	5539	4137	8422	12272	4175	8409	12137
4200	1220	2820	4850	1302	3009	4942	3578	6915	10061	3634	7515	11016
4500	1070	2480	4310	1139	2643	4434	3123	5653	8226	3172	6752	10044
4800		2200	3860	1004	2336	3998	2747	4764	6933	2791	6095	9192
5100		1960	3470	892	2079	3621	2433	3988	5921	2471	5525	8442
5400		1760	3130	798	1861	3294	2098	3315	5264	2202	4974	7777
5700		1590	2840	717	1675	3008	1829	2860	4570	1972	4453	7186
6000		1440	2580	648	1515	2755	1616	2522	3895	1776	4005	6658
6300		1310	2360	589	1376	2532	1539	2253	3379	1605	3614	6183
6600		1200	2160	537	1255	2322	1433	2017	2932	1455	3270	5755
6900			1990		1149	2124		1819	2565		2966	5245
7200			1870		1084	2019		1624	2259		3006	5081
7500			1730		1001	1877		1439	1991		2770	4759
7800			1600			1741			1775			4466
8100			1490			1618			1582			4197
8400			1390			1507			1419			3896
8700			1300			1406			1277			3528
9000			1220			1314			1151			3185











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5696	8599	11339	3490	5268	7244	5696	8599	11339
1800	5360	8092	10583	3284	4955	6812	5360	8092	10583
2100	5092	7687	9970	3116	4704	6469	5092	7687	9970
2400	4870	7352	9457	2980	4500	6185	4870	7352	9457
2700	4682	6986	9021	2864	4327	5946	4682	6986	9021
3000	4521	6629	8643	2767	4175	5738	4521	6629	8643
3300	4329	6321	8311	2680	4045	5560	4329	6321	8311
3600	5604	8460	11133	2602	3931	5401	3950	5772	7677
3900	5456	8238	10802	2536	3828	5260	3801	5565	7415
4200	5323	8037	10500	2476	3735	5132	3667	5380	7164
4500	5202	7854	10224	2418	3650	5016	3547	5213	6937
4800	5092	7687	9970	2367	3575	4910	3436	5061	6731
5100	4990	7533	9735	2286	3464	4812	3334	4917	6543
5400	4895	7391	9517	2211	3356	4709	3240	4783	6370
5700	4808	7259	9314	2141	3255	4565	3153	4659	6210
6000	4727	7084	9124	2084	3161	4436	3073	4544	6063
6300	4650	6914	8946	2024	3074	4317	2999	4437	5941
6600	4579	6756	8779	1968	2992	4198	2930	4338	5838
6900	2222	7796	10137		2914	4093	3492	5416	7212
7200	2175	7687	9970		2843	3995	3419	5311	7071
7500	2131	7583	9811		2780	3902	3350	5213	6937
7800	2089	7433	9660			3815	3284	5110	6811
8100	2050	7294	9517			3731	3223	5015	6692
8400	2013	7163	9380			3652	3165	4924	6579
8700	1978	7039	9249			3584	3110	4839	6472
9000	1945	6921	9124			3513	3058	4758	6370
FBO				700	1034	1234			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
812	0
974	0
1137	0
1299	0
1461	0
1624	0
1786	0
974	1
1055	1
1136	1
1217	1
1298	1
1380	1
1461	1
1542	1
1623	1
1704	1
1785	1
1244	2
1298	2
1352	2
1407	2
1461	2
1515	2
1569	2
1623	2

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	1.00	1.00	1.00
	0.68	0.80	0.74
	0.53	0.71	0.39

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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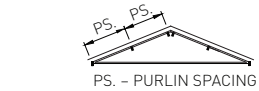
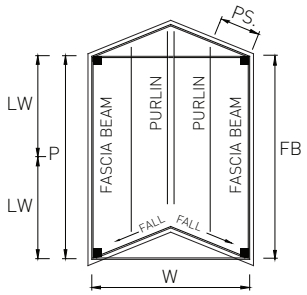
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 2400mm

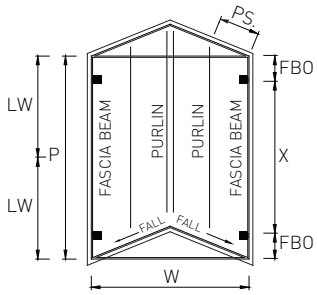
Maximum Load Width of Frames

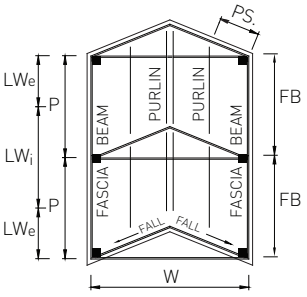
Maximum Allowable Awning Frame Load Width, LW (mm)

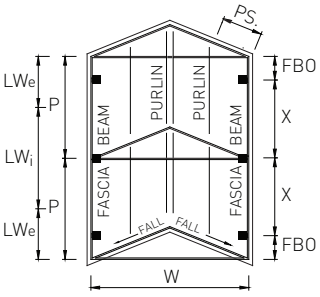
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	7880	15000	15000	9845	15000	15000	15000	15000	15000	15000	15000	15000
1800	5810	11620	15000	7513	13922	15000	13846	15000	15000	13743	15000	15000
2100	4450	9190	13610	5898	11272	15000	11136	15000	15000	11088	15000	15000
2400	3500	7430	11330	4739	9308	13469	9136	15000	15000	9123	15000	15000
2700	2820	6120	9560	3883	7807	11431	7616	14170	15000	7624	14040	15000
3000	2320	5110	8160	3235	6652	9918	6127	12269	15000	6200	12183	15000
3300	1940	4330	7040	2734	5732	8712	4992	10631	14982	5049	10667	14779
3600	1640	3710	6120	2338	4985	7712	4092	8655	13415	4137	8759	13253
3900	1410	3190	5370	2020	4371	6873	3425	7184	12077	3461	7268	11968
4200	1220	2770	4760	1762	3860	6160	2906	6039	10061	2936	6109	10349
4500	1070	2420	4230	1139	2643	4434	2471	5080	8226	2495	5136	8713
4800		2200	3860	1004	2336	3998	2747	4764	6933	2791	6095	9192
5100		1960	3470	892	2079	3621	2433	3988	5921	2471	5525	8442
5400		1760	3130	798	1861	3294	2098	3315	5264	2202	4974	7777
5700		1590	2840	717	1675	3008	1829	2860	4570	1972	4453	7186
6000		1440	2580	648	1515	2755	1616	2522	3895	1776	4005	6658
6300		1310	2360	589	1376	2532	1539	2253	3379	1605	3614	6183
6600		1200	2160	537	1255	2322	1433	2017	2932	1455	3270	5755
6900			1990		1149	2124		1819	2565		2966	5245
7200			1830		1055	1950		1624	2259		2693	4750
7500			1700		972	1795		1439	1991		2454	4324
7800			1580			1657			1775			3978
8100			1470			1533			1582			3665
8400			1370			1422			1419			3380
8700			1280			1323			1277			3119
9000			1200			1232			1151			2879











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5696	8599	11339	3490	5268	7244	5696	8599	11339
1800	5360	8092	10583	3284	4955	6812	5360	8092	10583
2100	5092	7687	9970	3116	4704	6469	5092	7687	9970
2400	4870	7352	9457	2980	4500	6185	4870	7352	9457
2700	4682	6986	9021	2864	4327	5946	4682	6986	9021
3000	4521	6629	8643	2767	4175	5738	4521	6629	8643
3300	4329	6321	8311	2680	4045	5560	4329	6321	8311
3600	4152	6054	8017	2602	3931	5401	4152	6054	8017
3900	3995	5834	7753	2536	3828	5260	3995	5834	7753
4200	3855	5640	7515	2476	3735	5132	3855	5640	7515
4500	5202	7854	10224	2418	3650	5016	3547	5213	6937
4800	5092	7687	9970	2367	3575	4910	3436	5061	6731
5100	4990	7533	9735	2286	3464	4812	3334	4917	6543
5400	4895	7391	9517	2211	3356	4709	3240	4783	6370
5700	4808	7259	9314	2141	3255	4565	3153	4659	6210
6000	4727	7084	9124	2084	3161	4436	3073	4544	6063
6300	4650	6914	8946	2024	3074	4317	2999	4437	5941
6600	4579	6756	8779	1968	2992	4198	2930	4338	5838
6900	4477	6608	8621		2914	4093	2865	4245	5741
7200	4383	6469	8472		2843	3995	2805	4158	5640
7500	4295	6339	8331		2780	3902	2748	4076	5561
7800	4211	6217	8197			3815	2695	3997	5478
8100	4133	6101	8070			3731	2645	3923	5398
8400	4058	5990	7948			3652	2597	3851	5323
8700	3987	5886	7833			3584	2552	3784	5250
9000	1945	2871	9124			3513	3049	4522	6370
FBO				700	1034	1234			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
812	0
974	0
1137	0
1299	0
1461	0
1624	0
1786	0
1948	0
2111	0
2273	0
1217	1
1298	1
1380	1
1461	1
1542	1
1623	1
1704	1
1785	1
1867	1
1948	1
2029	1
2110	1
2191	1
2273	1
2354	1
1623	2

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	1.00	1.00	1.00
	0.65	0.80	0.74
	0.50	0.70	0.39

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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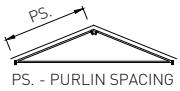
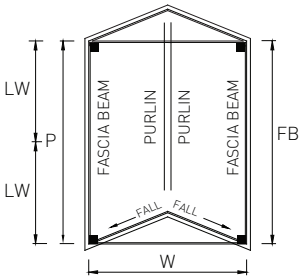
Maximum Load Width of Frames

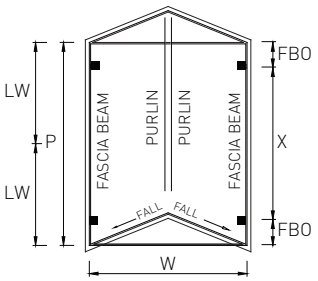
Roof Sheet - Long Spanning
No Intermediate Purlins

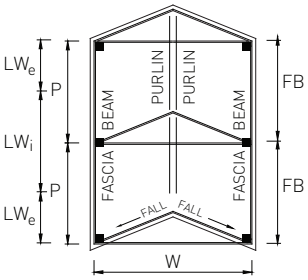
Maximum Allowable Awning Frame Load Width, LW (mm)

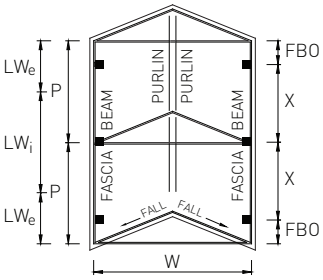
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	6090	11570	15000	7548	13367	15000	15000	15000	15000	15000	15000	15000
1800	4510	8920	12700	5785	10630	14968	12957	15000	15000	12957	15000	15000
2100	3460	7080	10390	4556	8632	12297	10452	15000	15000	10452	15000	15000
2400	2730	5740	8670	3670	7146	10301	8449	15000	15000	8509	15000	15000
2700	2200	4740	7340	3014	6009	8761	6678	13052	15000	6725	13238	15000
3000	1810	3970	6280	2515	5123	7574	5372	9500	13572	5411	11344	15000
3300	1510	3370	5430	2128	4424	6665	4383	7337	10585	4415	9230	13940
3600	1280	2890	4730	1822	3854	5910	3475	5674	8256	3626	7541	12503
3900	1100	2500	4150	1576	3384	5275	2773	4523	6582	2990	6174	10287
4200	960	2170	3680	1376	2993	4736	2256	3675	5348	2541	5209	8707
4500	840	1900	3280	1211	2664	4273	1847	3005	4373	2165	4400	7368
4800		1670	2940	1073	2384	3873	1558	2532	3685	1842	3707	6211
5100		1480	2650	958	2145	3526	1313	2120	3147	1605	3210	5395
5400		1320	2400	859	1940	3222	1115	1762	2798	1404	2789	4703
5700		1180	2180	775	1762	2954	972	1520	2429	1227	2420	4090
6000		1060	1990	703	1606	2718	859	1340	2070	1087	2128	3611
6300		950	1820	640	1470	2508	818	1197	1796	969	1885	3213
6600		860	1680	585	1350	2320	781	1072	1558	864	1667	2855
6900			1540		1243	2069		967	1363		1487	2549
7200			1420		1131	1816		863	1201		1343	2293
7500			1310		983	1584		765	1058		1211	2059
7800			1210			1437			943			1854
8100			1120			1301			841			1689
8400			1040			1175			754			1537
8700			960			1057			679			1397
9000			890			947			612			1286











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5603	8459	11171	3385	5111	7028	5603	8459	11171
1800	5273	7961	10423	3183	4808	6610	5273	7961	10423
2100	5009	7562	9815	3025	4564	6275	5009	7562	9815
2400	4791	7233	9308	2892	4365	6000	4791	7233	9308
2700	4606	6849	8877	2780	4196	5770	4606	6849	8877
3000	4446	6498	8503	2685	4054	5568	4446	6498	8503
3300	4247	6197	8176	2601	3926	5394	4247	6197	8176
3600	4073	5941	7885	2527	3814	5243	4073	5941	7885
3900	3919	5729	7625	2460	3716	5104	3919	5729	7625
4200	3782	5539	7379	2403	3626	4982	3782	5539	7379
4500	3658	5367	7146	2331	3533	4870	3658	5367	7146
4800	3546	5211	6935	2243	3407	4766	3546	5211	6935
5100	3441	5068	6741	2169	3289	4617	3441	5068	6741
5400	3344	4933	6563	2099	3183	4472	3344	4933	6563
5700	3255	4805	6399	2035	3089	4339	3255	4805	6399
6000	3173	4687	6247	1976	2996	4213	3173	4687	6247
6300	3096	4577	6105	1920	2915	4095	3096	4577	6105
6600	3025	4475	5979	1868	2840	3986	3025	4475	5979
6900	2959	4379	5880		2768	3889	2959	4379	5880
7200	2896	4289	5787		2702	3792	2896	4289	5787
7500	2838	4205	5698		2637	3706	2838	4205	5698
7800	2783	4123	5613			3618	2783	4123	5613
8100	2731	4046	5533			3541	2731	4046	5533
8400	2681	3973	5456			3468	2681	3973	5456
8700	2635	3904	5382			3398	2635	3904	5382
9000	2591	3838	5312			3332	2591	3838	5312
FBO				700	1018	1212			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	No Intermediate Purlins
932	
1087	
1242	
1398	
1553	
1708	
1863	
2019	
2174	
2329	
2485	
2640	
2795	
2951	
3106	
3261	
3416	
3572	
3727	
3882	
4038	
4193	
4348	
4503	
4659	

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.83	0.87	0.81
	0.50	0.65	0.30
	0.35	0.54	0.15

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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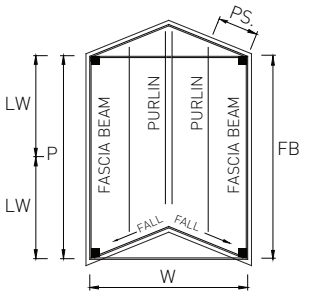
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1200mm

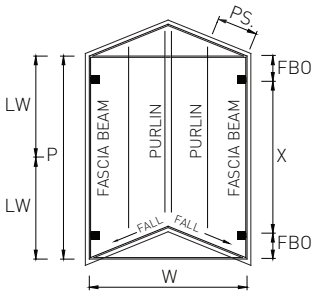
Maximum Load Width of Frames

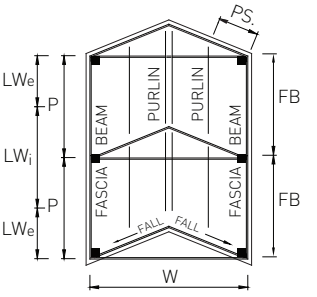
Maximum Allowable Awning Frame Load Width, LW (mm)

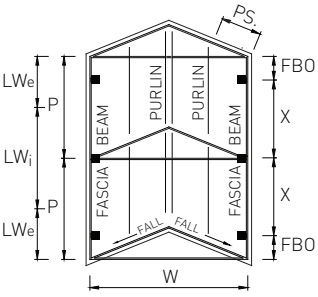
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	6090	11570	15000	7548	13367	15000	15000	15000	15000	15000	15000	15000
1800	4510	8920	12700	5785	10630	14968	12957	15000	15000	12957	15000	15000
2100	3460	7080	10390	4556	8632	12297	10452	15000	15000	10452	15000	15000
2400	2730	5780	8860	2771	5779	8542	8619	15000	15000	8619	15000	15000
2700	2200	4770	7490	2235	4824	7229	7200	13052	15000	7200	13344	15000
3000	1810	3990	6400	1840	4079	6218	5811	9500	13572	6094	11569	15000
3300	1520	3390	5540	1539	3432	5442	4490	7337	10585	5163	10123	14202
3600	1280	2910	4830	1306	2928	4800	3475	5674	8256	4383	8928	12708
3900	1100	2520	4240	1122	2526	4263	2773	4523	6582	3765	7929	11448
4200	960	2200	3760	975	2202	3810	2256	3675	5348	3262	7086	10392
4500	840	1940	3350	854	1936	3423	1847	3005	4373	2851	6326	9476
4800		1720	3030	765	1749	3116	1558	2532	3685	2610	5768	8782
5100		1540	2720	681	1562	2825	1313	2120	3147	2325	5229	8059
5400		1380	2460	610	1403	2563	1115	1762	2798	2083	4722	7420
5700		1250	2240	550	1267	2319	972	1520	2429	1877	4264	6853
6000		1130	2040	498	1150	2108	859	1340	2070	1699	3865	6005
6300		1030	1870	453	1048	1925	818	1197	1796	1545	3516	5336
6600		940	1720	414	959	1765	781	1072	1558	1410	3212	4732
6900			1580		881	1623		967	1363		2861	4181
7200			1470		821	1519		863	1201		2549	3735
7500			1360		760	1407		765	1058		2289	3355
7800			1270			1307			943			3005
8100			1180			1217			841			2701
8400			1100			1136			754			2459
8700			1030			1063			679			2235
9000			960			997			612			2026

PS. – PURLIN SPACING









Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5603	8459	11171	3385	5111	7028	5603	8459	11171
1800	5273	7961	10423	3183	4808	6610	5273	7961	10423
2100	5009	7562	9815	3025	4564	6275	5009	7562	9815
2400	6000	9000	12000	2892	4365	6000	4608	6902	8933
2700	6000	9000	12000	2780	4196	5770	4431	6508	8514
3000	5858	8844	11739	2685	4054	5568	4233	6176	8152
3300	5675	8568	11332	2601	3926	5394	4043	5900	7835
3600	5513	8323	10967	2527	3814	5243	3877	5671	7554
3900	5368	8104	10639	2460	3716	5104	3731	5468	7283
4200	5237	7906	10340	2403	3626	4982	3600	5286	7036
4500	5118	7726	10066	2331	3533	4870	3481	5121	6813
4800	5734	8656	11462	2243	3407	4766	4316	6303	8291
5100	5619	8483	11206	2169	3289	4617	4193	6115	8085
5400	5513	8323	10967	2099	3183	4472	4079	5949	7895
5700	5414	8174	10745	2035	3089	4339	3974	5805	7718
6000	5323	8036	10536	1976	2996	4213	3877	5671	7554
6300	5237	7906	10340	1920	2915	4095	3787	5547	7390
6600	5156	7784	10155	1868	2840	3986	3703	5430	7232
6900	5042	7670	9980		2768	3889	3621	5321	7084
7200	5361	8323	10967		2702	3792	3851	5949	7895
7500	5253	8210	10799		2637	3706	3772	5840	7761
7800	5150	8050	10639			3618	3699	5726	7634
8100	5053	7899	10486			3541	3629	5619	7514
8400	4962	7756	10340			3468	3564	5517	7390
8700	4877	7624	10200			3398	3503	5423	7270
9000	4795	7495	10066			3332	3444	5331	7157
FBO				700	1018	1212			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	0
932	0
1087	0
621	1
698	1
776	1
854	1
931	1
1009	1
1087	1
1164	1
828	2
879	2
931	2
983	2
1035	2
1087	2
1138	2
1190	2
931	3
970	3
1009	3
1048	3
1087	3
1125	3
1164	3

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.86	0.88	0.81
	0.49	0.66	0.30
	0.34	0.55	0.15

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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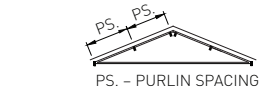
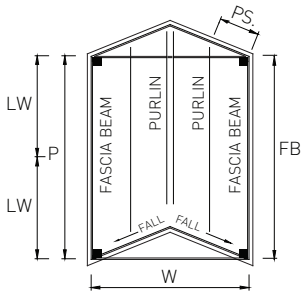
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1800mm

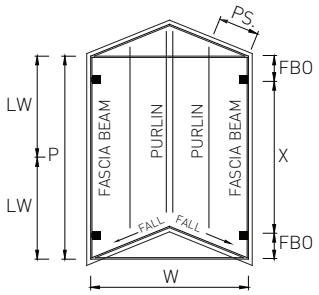
Maximum Load Width of Frames

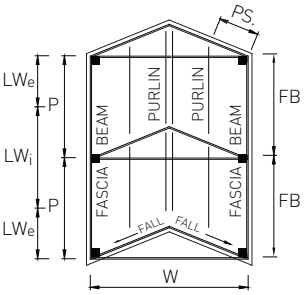
Maximum Allowable Awning Frame Load Width, LW (mm)

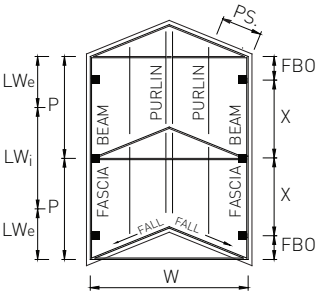
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	6090	11570	15000	7548	13367	15000	15000	15000	15000	15000	15000	15000
1800	4510	8920	12700	5785	10630	14968	12957	15000	15000	12957	15000	15000
2100	3460	7080	10390	4556	8632	12297	10452	15000	15000	10452	15000	15000
2400	2730	5740	8670	3670	7146	10301	8449	15000	15000	8509	15000	15000
2700	2200	4740	7340	3014	6009	8761	6678	13052	15000	6725	13238	15000
3000	1810	3970	6280	2515	5123	7574	5372	9500	13572	5411	11344	15000
3300	1510	3370	5430	2128	4424	6665	4383	7337	10585	4415	9230	13940
3600	1280	2910	4830	1306	2928	4800	3475	5674	8256	4383	8928	12708
3900	1100	2520	4240	1122	2526	4263	2773	4523	6582	3765	7929	11448
4200	960	2200	3760	975	2202	3810	2256	3675	5348	3262	7086	10392
4500	840	1940	3350	854	1936	3423	1847	3005	4373	2851	6326	9476
4800		1720	3000	755	1716	3090	1558	2532	3685	2511	5577	8674
5100		1530	2700	672	1530	2773	1313	2120	3147	2225	4947	7967
5400		1380	2440	601	1373	2493	1115	1762	2798	1984	4411	7340
5700		1240	2210	542	1239	2253	972	1520	2429	1778	3951	6782
6000		1130	2010	490	1122	2042	859	1340	2070	1601	3556	6005
6300		1020	1840	445	1021	1857	818	1197	1796	1447	3211	5336
6600		940	1690	406	932	1695	781	1072	1558	1313	2908	4732
6900			1550		854	1553		967	1363		2640	4181
7200			1460		813	1498		863	1201		2549	3735
7500			1350		751	1387		765	1058		2289	3355
7800			1250			1288			943			3005
8100			1170			1199			841			2701
8400			1090			1118			754			2459
8700			1020			1046			679			2235
9000			950			979			612			2026











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5603	8459	11171	3385	5111	7028	5603	8459	11171
1800	5273	7961	10423	3183	4808	6610	5273	7961	10423
2100	5009	7562	9815	3025	4564	6275	5009	7562	9815
2400	4791	7233	9308	2892	4365	6000	4791	7233	9308
2700	4606	6849	8877	2780	4196	5770	4606	6849	8877
3000	4446	6498	8503	2685	4054	5568	4446	6498	8503
3300	4247	6197	8176	2601	3926	5394	4247	6197	8176
3600	5513	8323	10967	2527	3814	5243	3877	5671	7554
3900	5368	8104	10639	2460	3716	5104	3731	5468	7283
4200	5237	7906	10340	2403	3626	4982	3600	5286	7036
4500	5118	7726	10066	2331	3533	4870	3481	5121	6813
4800	5009	7562	9815	2243	3407	4766	3370	4970	6610
5100	4909	7411	9583	2169	3289	4617	3270	4826	6425
5400	4816	7271	9367	2099	3183	4472	3178	4694	6256
5700	4730	7125	9166	2035	3089	4339	3093	4572	6099
6000	4650	6945	8979	1976	2996	4213	3015	4459	5963
6300	4575	6779	8803	1920	2915	4095	2942	4355	5855
6600	4504	6623	8638	1868	2840	3986	2874	4257	5753
6900	4406	6478	8482		2768	3889	2812	4166	5657
7200	2140	7562	9815		2702	3792	3352	5218	6945
7500	2096	7460	9658		2637	3706	3284	5121	6813
7800	2056	7317	9509			3618	3221	5023	6689
8100	2017	7179	9367			3541	3161	4929	6572
8400	1981	7049	9232			3468	3104	4840	6461
8700	1946	6926	9103			3398	3049	4755	6356
9000	1914	6811	8979			3332	2999	4676	6256
FBO				700	1018	1212			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	0
932	0
1087	0
1242	0
1398	0
1553	0
1708	0
931	1
1009	1
1087	1
1164	1
1242	1
1319	1
1397	1
1475	1
1552	1
1630	1
1708	1
1785	1
1242	2
1294	2
1345	2
1397	2
1449	2
1501	2
1552	2

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.87	0.87	0.81
	0.50	0.66	0.30
	0.35	0.55	0.15

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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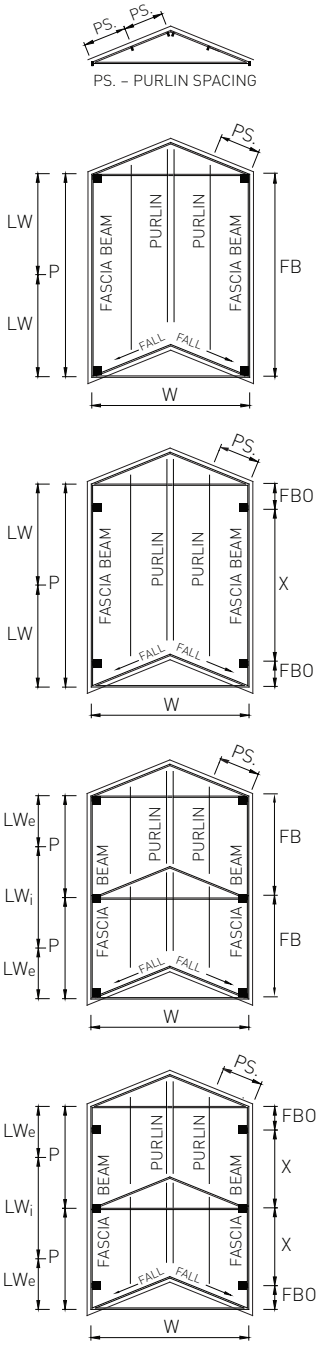
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 2400mm

Maximum Load Width of Frames

Maximum Allowable Awning Frame Load Width, LW (mm)

W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	6090	11570	15000	7548	13367	15000	15000	15000	15000	15000	15000	15000
1800	4510	8920	12700	5785	10630	14968	12957	15000	15000	12957	15000	15000
2100	3460	7080	10390	4556	8632	12297	10452	15000	15000	10452	15000	15000
2400	2730	5740	8670	3670	7146	10301	8449	15000	15000	8509	15000	15000
2700	2200	4740	7340	3014	6009	8761	6678	13052	15000	6725	13238	15000
3000	1810	3970	6280	2515	5123	7574	5372	9500	13572	5411	11344	15000
3300	1510	3370	5430	2128	4424	6665	4383	7337	10585	4415	9230	13940
3600	1280	2890	4730	1822	3854	5910	3475	5674	8256	3626	7541	12503
3900	1100	2500	4150	1576	3384	5275	2773	4523	6582	2990	6174	10287
4200	960	2170	3680	1376	2993	4736	2256	3675	5348	2541	5209	8707
4500	840	1900	3280	1211	2664	4273	1847	3005	4373	2165	4400	7368
4800		1720	3000	755	1716	3090	1558	2532	3685	2511	5577	8674
5100		1530	2700	672	1530	2773	1313	2120	3147	2225	4947	7967
5400		1380	2440	601	1373	2493	1115	1762	2798	1984	4411	7340
5700		1240	2210	542	1239	2253	972	1520	2429	1778	3951	6782
6000		1130	2010	490	1122	2042	859	1340	2070	1601	3556	6005
6300		1020	1840	445	1021	1857	818	1197	1796	1447	3211	5336
6600		940	1690	406	932	1695	781	1072	1558	1313	2908	4732
6900			1550		854	1553		967	1363		2640	4181
7200			1430		785	1426		863	1201		2400	3735
7500			1330		724	1314		765	1058		2183	3355
7800			1230			1214			943			3005
8100			1150			1124			841			2701
8400			1070			1043			754			2459
8700			1000			970			679			2235
9000			940			904			612			2026



Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5603	8459	11171	3386	5113	7029	5603	8459	11171
1800	5273	7961	10423	3185	4809	6608	5273	7961	10423
2100	5009	7562	9815	3024	4565	6277	5009	7562	9815
2400	4791	7233	9308	2893	4367	6002	4791	7233	9308
2700	4606	6849	8877	2779	4198	5769	4606	6849	8877
3000	4446	6498	8503	2683	4052	5570	4446	6498	8503
3300	4247	6197	8176	2600	3927	5396	4247	6197	8176
3600	4073	5941	7885	2528	3816	5241	4073	5941	7885
3900	3919	5729	7625	2461	3717	5105	3919	5729	7625
4200	3782	5539	7379	2401	3625	4980	3782	5539	7379
4500	3658	5367	7146	2327	3536	4869	3658	5367	7146
4800	5009	7562	9815	2247	3403	4767	3370	4970	6610
5100	4909	7411	9583	2173	3293	4621	3270	4826	6425
5400	4816	7271	9367	2103	3186	4476	3178	4694	6256
5700	4730	7125	9166	2039	3086	4335	3093	4572	6099
6000	4650	6945	8979	1979	2999	4209	3015	4459	5963
6300	4575	6779	8803	1924	2919	4099	2942	4355	5855
6600	4504	6623	8638	1872	2836	3990	2874	4257	5753
6900	4406	6478	8482		2764	3886	2812	4166	5657
7200	4313	6343	8334		2698	3795	2752	4081	5566
7500	4225	6215	8195		2634	3702	2696	4000	5479
7800	4144	6095	8063			3622	2644	3923	5397
8100	4066	5981	7937			3544	2595	3849	5318
8400	3993	5873	7817			3471	2548	3780	5243
8700	3924	5771	7703			3395	2504	3714	5171
9000	3857	5674	7594			3329	2461	3652	5102
FBO				700	1017	1213			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	0
932	0
1087	0
1242	0
1398	0
1553	0
1708	0
1863	0
2019	0
2174	0
2329	0
1242	1
1319	1
1397	1
1475	1
1552	1
1630	1
1708	1
1785	1
1863	1
1941	1
2018	1
2096	1
2174	1
2251	1
2329	1

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.86	0.87	0.81
	0.50	0.65	0.31
	0.35	0.51	0.16

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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Maximum Load Width of Frames

Roof Sheet - Long Spanning
No Intermediate Purlins

Maximum Allowable Awning Frame Load Width, LW (mm)												
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5700	10940	15000	7123	12723	15000	12676	15000	15000	12526	15000	15000
1800	4200	8410	12060	5436	10073	14225	9929	15000	15000	9846	15000	15000
2100	3220	6650	9850	4267	8156	11660	7986	14052	15000	7944	13851	15000
2400	2530	5380	8190	3429	6735	9746	6551	11867	15000	6536	11723	15000
2700	2040	4430	6910	2809	5649	8271	5461	10161	13708	5462	10059	13473
3000	1680	3700	5910	2341	4813	7176	4394	8798	12082	4442	8728	11891
3300	1400	3130	5090	1978	4148	6303	3580	7623	10743	3618	7642	10589
3600	1190	2680	4430	1691	3607	5580	2935	6207	9620	2964	6276	9495
3900	1020	2310	3890	1462	3163	4973	2456	5152	8660	2480	5207	8575
4200	880	2000	3440	1275	2793	4457	2084	4331	7215	2103	4377	7415
4500	770	1750	3060	1121	2483	4016	1772	3643	5899	1787	3680	6243
4800		1540	2740	993	2220	3636	1528	3112	4972	1540	3143	5346
5100		1360	2470	886	1995	3306	1333	2694	4246	1343	2720	4643
5400		1200	2230	794	1803	3017	1163	2332	3775	1172	2354	4029
5700		1070	2030	716	1636	2764	1025	2037	3277	1032	2056	3533
6000		950	1850	649	1490	2540	912	1798	2793	918	1814	3133
6300		850	1690	591	1363	2341	812	1586	2423	817	1600	2777
6600		770	1550	540	1251	2164	727	1411	2102	731	1423	2472
6900			1410		1152	2005		1271	1839		1281	2216
7200			1290		1064	1862		1144	1620		1153	1985
7500			1170		985	1733		1032	1428		1042	1785
7800			1080			1617			1273			1621
8100			990			1511			1135			1471
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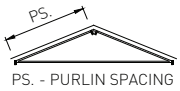
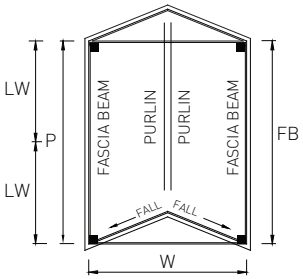
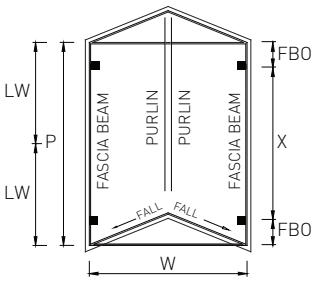
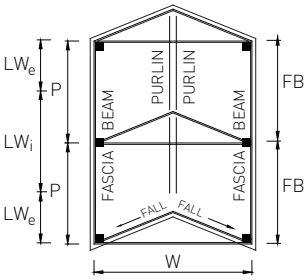
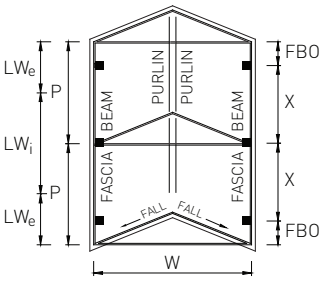


PS. - PURLIN SPACING









Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)										Purlin Details	
W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Max. Purlin Spacing (mm)	Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	5116	7723	9963	3144	4746	6522	5116	7723	9963	812	No Intermediate Purlins
1800	4814	7224	9269	2956	4463	6136	4814	7224	9269	974	
2100	4571	6690	8709	2808	4240	5827	4571	6690	8709	1137	
2400	4288	6260	8244	2687	4055	5573	4288	6260	8244	1299	
2700	4052	5912	7850	2584	3899	5360	4052	5912	7850	1461	
3000	3852	5636	7510	2495	3765	5175	3852	5636	7510	1624	
3300	3679	5396	7186	2417	3650	5015	3679	5396	7186	1786	
3600	3527	5185	6900	2336	3535	4873	3527	5185	6900	1948	
3900	3390	4998	6646	2233	3384	4743	3390	4998	6646	2111	
4200	3267	4821	6420	2139	3245	4548	3267	4821	6420	2273	
4500	3156	4663	6215	2051	3117	4374	3156	4663	6215	2435	
4800	3056	4519	6030	1979	3000	4221	3056	4519	6030	2598	
5100	2964	4387	5889	1911	2896	4073	2964	4387	5889	2760	
5400	2881	4267	5763	1848	2802	3940	2881	4267	5763	2922	
5700	2804	4156	5646	1795	2719	3824	2804	4156	5646	3085	
6000	2733	4053	5536	1739	2642	3707	2733	4053	5536	3247	
6300	2667	3958	5433	1694	2562	3604	2667	3958	5433	3410	
6600	2606	3869	5336	1644	2494	3507	2606	3869	5336	3572	
6900	2549	3786	5244		2428	3421	2549	3786	5244	3734	
7200	2495	3708	5157		2368	3334	2495	3708	5157	3897	
7500	2445	3635	5075		2315	3257	2445	3635	5075	4059	
7800	2397	3564	4996			3178	2397	3564	4996	4221	
8100	2352	3498	4911			3108	2352	3498	4911	4384	
8400	2310	3435	4830			3042	2310	3435	4830	4546	
8700	2270	3375	4753			3006	2270	3375	4753	4708	
9000	2232	3318	4679			3034	2232	3318	4679	4871	
FBO				569	821	951					

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.90	0.98	1.00
	0.58	0.78	0.43
	0.45	0.69	0.32

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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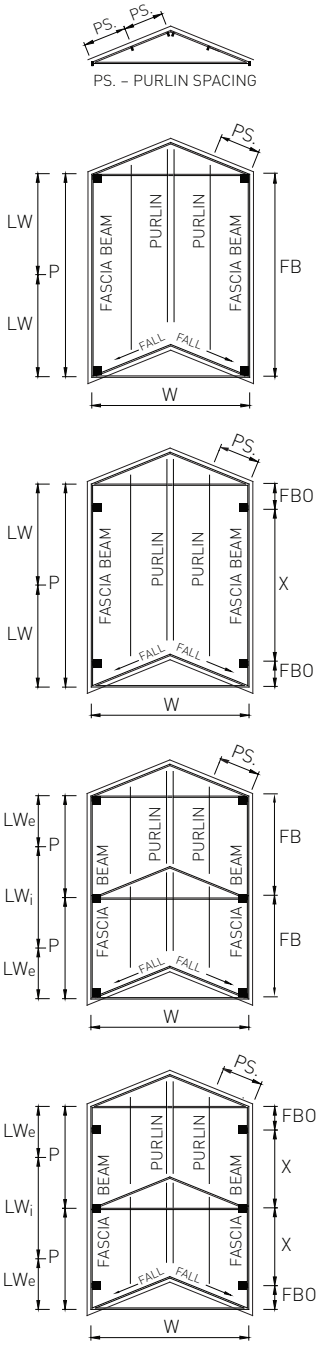
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1200mm

Maximum Load Width of Frames

Maximum Allowable Awning Frame Load Width, LW (mm)

W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5700	10940	15000	7123	12723	15000	12676	15000	15000	12526	15000	15000
1800	4200	8410	12060	5436	10073	14225	9929	15000	15000	9846	15000	15000
2100	3220	6650	9850	4267	8156	11660	7986	14052	15000	7944	13851	15000
2400	2530	5410	8370	2682	5431	8068	6565	11969	15000	6550	11825	15000
2700	2040	4450	7050	2184	4523	6812	5470	10239	14030	5471	10137	13791
3000	1680	3720	6020	1801	3828	5877	4620	8859	12327	4631	8789	12133
3300	1400	3150	5190	1500	3279	5133	3947	7736	10932	3965	7690	10773
3600	1190	2700	4520	1269	2836	4520	3408	6810	9768	3428	6782	9638
3900	1020	2340	3970	1087	2475	4008	2967	6039	8801	2991	6024	8695
4200	880	2040	3510	942	2177	3576	2566	4958	7215	2604	5384	7893
4500	770	1800	3120	824	1912	3208	2240	4054	5899	2273	4837	7196
4800		1600	2820	734	1714	2916	2034	3416	4972	2066	4382	6664
5100		1420	2530	652	1526	2641	1772	2860	4246	1838	3973	6115
5400		1280	2290	583	1368	2402	1505	2377	3775	1645	3616	5630
5700		1150	2080	525	1233	2193	1311	2051	3277	1480	3304	5202
6000		1040	1890	475	1117	2010	1159	1808	2793	1338	3029	4822
6300		950	1730	432	1016	1848	1104	1615	2423	1215	2787	4481
6600		870	1590	394	929	1704	1054	1447	2102	1108	2559	4173
6900			1460		852	1576		1304	1839		2344	3894
7200			1360		790	1466		1165	1620		2211	3668
7500			1260		730	1363		1032	1428		2048	3436
7800			1170			1270			1273			3226
8100			1090			1184			1135			3033
8400			1020			1104			1017			2791
8700			950			1031			916			2528
9000			890			966			825			2282



Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5116	7723	9963	3144	4746	6522	5116	7723	9963
1800	4814	7224	9269	2956	4463	6136	4814	7224	9269
2100	4571	6690	8709	2808	4240	5827	4571	6690	8709
2400	5761	8698	11417	2687	4055	5573	4088	5962	7911
2700	5540	8363	10923	2584	3899	5360	3863	5652	7529
3000	5348	8075	10493	2495	3765	5175	3672	5387	7173
3300	5181	7822	10113	2417	3650	5015	3507	5156	6861
3600	5033	7599	9774	2336	3535	4873	3358	4952	6587
3900	4901	7398	9469	2233	3384	4743	3226	4763	6345
4200	4781	7150	9192	2139	3245	4548	3109	4595	6128
4500	5348	8075	10493	2051	3117	4374	3863	5652	7529
4800	5235	7903	10235	1979	3000	4221	3745	5488	7310
5100	5130	7745	9996	1911	2896	4073	3637	5338	7107
5400	5033	7599	9774	1848	2802	3940	3538	5200	6920
5700	4943	7463	9567	1795	2719	3824	3445	5072	6747
6000	4859	7326	9374	1739	2642	3707	3358	4952	6587
6300	4781	7150	9192	1694	2562	3604	3277	4836	6438
6600	4707	6986	9022	1644	2494	3507	3201	4728	6299
6900	5003	7707	9939		2428	3421	3402	5303	7059
7200	4896	7599	9774		2368	3334	3330	5200	6920
7500	4799	7496	9617		2315	3257	3263	5103	6789
7800	4705	7349	9469			3178	3199	5003	6666
8100	4618	7213	9327			3108	3140	4911	6549
8400	4534	7082	9192			3042	3083	4822	6438
8700	4454	6957	9064			3006	3029	4737	6333
9000	4670	7295	9774			3034	3176	4966	6920
FBO				569	821	951			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
812	0
974	0
1137	0
649	1
730	1
811	1
892	1
974	1
1055	1
1136	1
811	2
865	2
920	2
974	2
1028	2
1082	2
1136	2
1190	2
933	3
974	3
1014	3
1055	3
1095	3
1136	3
1177	3
974	4

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.95	0.98	1.00
	0.61	0.78	0.43
	0.48	0.69	0.32

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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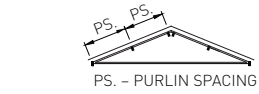
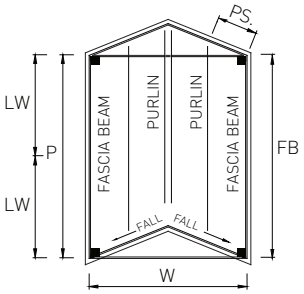
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1800mm

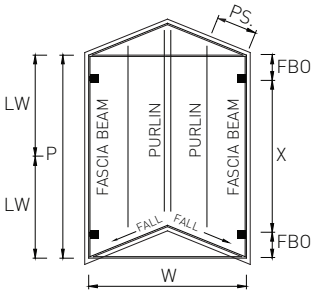
Maximum Load Width of Frames

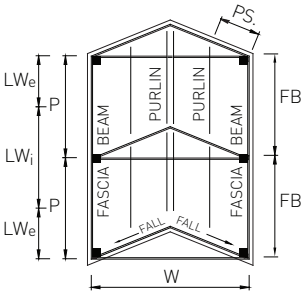
Maximum Allowable Awning Frame Load Width, LW (mm)

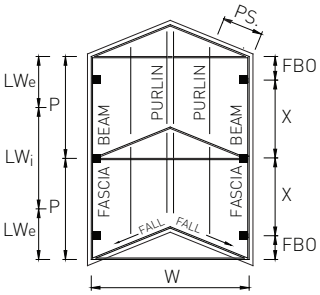
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5700	10940	15000	7123	12723	15000	12676	15000	15000	12526	15000	15000
1800	4200	8410	12060	5436	10073	14225	9929	15000	15000	9846	15000	15000
2100	3220	6650	9850	4267	8156	11660	7986	14052	15000	7944	13851	15000
2400	2530	5380	8190	3429	6735	9746	6551	11867	15000	6536	11723	15000
2700	2040	4430	6910	2809	5649	8271	5461	10161	13708	5462	10059	13473
3000	1680	3700	5910	2341	4813	7176	4394	8798	12082	4442	8728	11891
3300	1400	3130	5090	1978	4148	6303	3580	7623	10743	3618	7642	10589
3600	1190	2700	4520	1269	2836	4520	3408	6810	9768	3428	6782	9638
3900	1020	2340	3970	1087	2475	4008	2967	6039	8801	2991	6024	8695
4200	880	2040	3510	942	2177	3576	2566	4958	7215	2604	5384	7893
4500	770	1800	3120	824	1912	3208	2240	4054	5899	2273	4837	7196
4800		1590	2790	727	1690	2893	1970	3416	4972	1999	4366	6586
5100		1420	2510	645	1504	2620	1745	2860	4246	1771	3959	6048
5400		1270	2260	577	1347	2383	1505	2377	3775	1577	3564	5572
5700		1150	2050	519	1212	2176	1311	2051	3277	1413	3190	5149
6000		1040	1870	469	1096	1994	1159	1808	2793	1272	2869	4770
6300		950	1710	426	996	1832	1104	1615	2423	1150	2589	4430
6600		860	1560	388	908	1680	1028	1447	2102	1043	2343	4123
6900			1440		831	1537		1304	1839		2125	3758
7200			1350		784	1461		1165	1620		2153	3640
7500			1250		724	1358		1032	1428		1985	3410
7800			1160			1260			1273			3199
8100			1080			1171			1135			3007
8400			1000			1091			1017			2791
8700			940			1017			916			2528
9000			880			951			825			2282











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5116	7723	9963	3142	4744	6523	5116	7723	9963
1800	4814	7224	9269	2958	4464	6137	4814	7224	9269
2100	4571	6690	8709	2809	4241	5826	4571	6690	8709
2400	4288	6260	8244	2686	4056	5572	4288	6260	8244
2700	4052	5912	7850	2583	3901	5359	4052	5912	7850
3000	3852	5636	7510	2494	3767	5174	3852	5636	7510
3300	3679	5396	7186	2419	3651	5014	3679	5396	7186
3600	5033	7599	9774	2332	3538	4872	3358	4952	6587
3900	4901	7398	9469	2229	3380	4747	3226	4763	6345
4200	4781	7150	9192	2135	3241	4552	3109	4595	6128
4500	4672	6908	8940	2055	3113	4378	3003	4443	5946
4800	4571	6690	8709	1983	3004	4217	2908	4306	5804
5100	4441	6491	8495	1915	2900	4076	2821	4180	5672
5400	4321	6309	8298	1851	2806	3944	2742	4065	5550
5700	4210	6142	8114	1792	2716	3821	2668	3960	5435
6000	4107	5988	7943	1743	2639	3710	2601	3862	5328
6300	4012	5857	7782	1690	2566	3607	2538	3771	5227
6600	3923	5735	7632	1648	2498	3511	2480	3686	5133
6900	1903	6833	8861		2432	3418	2956	4627	6170
7200	1863	6690	8709		2371	3338	2893	4532	6047
7500	1826	6555	8565		2312	3254	2835	4443	5946
7800	1790	6426	8428			3182	2779	4355	5860
8100	1756	6306	8298			3112	2727	4274	5777
8400	1725	6193	8174			3045	2678	4197	5698
8700	1695	6085	8056			3007	2632	4124	5622
9000	1666	5983	7943			3032	2588	4055	5550
FBO				571	822	953			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
812	0
974	0
1137	0
1299	0
1461	0
1624	0
1786	0
974	1
1055	1
1136	1
1217	1
1298	1
1380	1
1461	1
1542	1
1623	1
1704	1
1785	1
1244	2
1298	2
1352	2
1407	2
1461	2
1515	2
1569	2
1623	2

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.95	0.98	1.00
	0.61	0.78	0.44
	0.48	0.69	0.31

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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Roof Sheet - Short Spanning
Maximum Purlin Spacing - 2400mm

Maximum Load Width of Frames

Maximum Allowable Awning Frame Load Width, LW (mm)												
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5700	10940	15000	7123	12723	15000	12676	15000	15000	12526	15000	15000
1800	4200	8410	12060	5436	10073	14225	9929	15000	15000	9846	15000	15000
2100	3220	6650	9850	4267	8156	11660	7986	14052	15000	7944	13851	15000
2400	2530	5380	8190	3429	6735	9746	6551	11867	15000	6536	11723	15000
2700	2040	4430	6910	2809	5649	8271	5461	10161	13708	5462	10059	13473
3000	1680	3700	5910	2341	4813	7176	4394	8798	12082	4442	8728	11891
3300	1400	3130	5090	1978	4148	6303	3580	7623	10743	3618	7642	10589
3600	1190	2680	4430	1691	3607	5580	2935	6207	9620	2964	6276	9495
3900	1020	2310	3890	1462	3163	4973	2456	5152	8660	2480	5207	8575
4200	880	2000	3440	1275	2793	4457	2084	4331	7215	2103	4377	7415
4500	770	1750	3060	824	1912	3208	1772	3643	5899	1787	3680	6243
4800		1590	2790	727	1690	2893	1970	3416	4972	1999	4366	6586
5100		1420	2510	645	1504	2620	1745	2860	4246	1771	3959	6048
5400		1270	2260	577	1347	2383	1505	2377	3775	1577	3564	5572
5700		1150	2050	519	1212	2176	1311	2051	3277	1413	3190	5149
6000		1040	1870	469	1096	1994	1159	1808	2793	1272	2869	4770
6300		950	1710	426	996	1832	1104	1615	2423	1150	2589	4430
6600		860	1560	388	908	1680	1028	1447	2102	1043	2343	4123
6900			1440		831	1537		1304	1839		2125	3758
7200			1330		764	1411		1165	1620		1930	3403
7500			1230		704	1299		1032	1428		1758	3098
7800			1140			1199			1273			2850
8100			1060			1109			1135			2626
8400			990			1029			1017			2422
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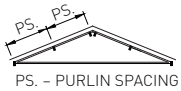
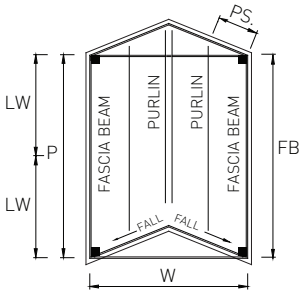
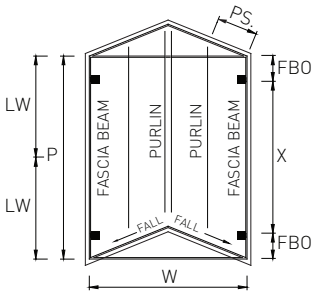
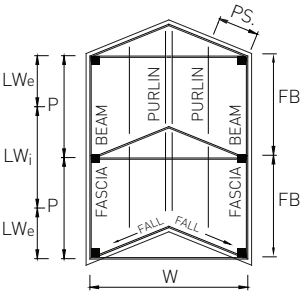
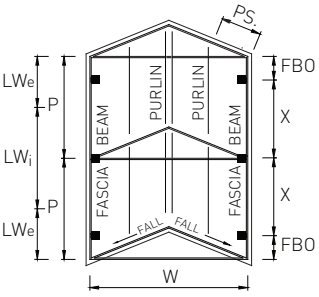
9000			870			892			825			2063











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)										Purlin Details	
W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Max. Purlin Spacing (mm)	Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	5116	7723	9963	3144	4746	6522	5116	7723	9963	812	0
1800	4814	7224	9269	2956	4463	6136	4814	7224	9269	974	0
2100	4571	6690	8709	2808	4240	5827	4571	6690	8709	1137	0
2400	4288	6260	8244	2687	4055	5573	4288	6260	8244	1299	0
2700	4052	5912	7850	2584	3899	5360	4052	5912	7850	1461	0
3000	3852	5636	7510	2495	3765	5175	3852	5636	7510	1624	0
3300	3679	5396	7186	2417	3650	5015	3679	5396	7186	1786	0
3600	3527	5185	6900	2336	3535	4873	3527	5185	6900	1948	0
3900	3390	4998	6646	2233	3384	4743	3390	4998	6646	2111	0
4200	3267	4821	6420	2139	3245	4548	3267	4821	6420	2273	0
4500	4672	6908	8940	2051	3117	4374	3003	4443	5946	1217	1
4800	4571	6690	8709	1979	3000	4221	2908	4306	5804	1298	1
5100	4441	6491	8495	1911	2896	4073	2821	4180	5672	1380	1
5400	4321	6309	8298	1848	2802	3940	2742	4065	5550	1461	1
5700	4210	6142	8114	1795	2719	3824	2668	3960	5435	1542	1
6000	4107	5988	7943	1739	2642	3707	2601	3862	5328	1623	1
6300	4012	5857	7782	1694	2562	3604	2538	3771	5227	1704	1
6600	3923	5735	7632	1644	2494	3507	2480	3686	5133	1785	1
6900	3836	5620	7489		2428	3421	2425	3607	5043	1867	1
7200	3755	5512	7343		2368	3334	2374	3533	4952	1948	1
7500	3680	5410	7205		2315	3257	2326	3466	4861	2029	1
7800	3608	5305	7074			3178	2281	3399	4774	2110	1
8100	3541	5206	6951			3108	2238	3335	4692	2191	1
8400	3477	5112	6834			3042	2198	3274	4615	2273	1
8700	3416	5023	6723			3006	2159	3218	4541	2354	1
9000	1666	2450	7943			3034	2581	3845	5550	1623	2
FBO				569	821	951					

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.94	0.98	1.00
	0.61	0.78	0.43
	0.47	0.69	0.32

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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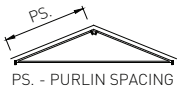
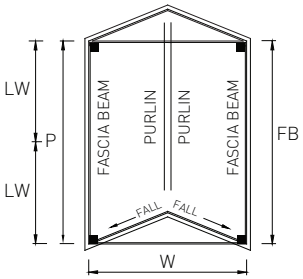
Roof Sheet - Long Spanning
No Intermediate Purlins

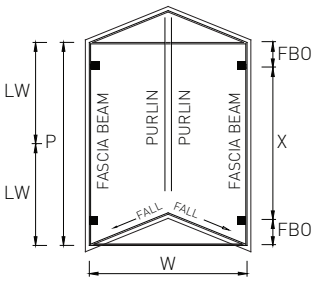
Maximum Load Width of Frames

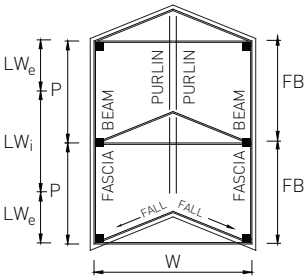
Maximum Allowable Awning Frame Load Width, LW (mm)

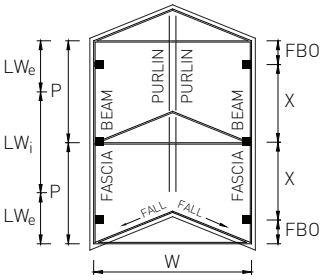
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	4360	8270	11440	5402	9565	13206	11796	15000	15000	11796	15000	15000
1800	3220	6380	9090	4140	7607	10712	9272	15000	15000	9272	15000	15000
2100	2470	5070	7430	3260	6177	8800	7480	13042	15000	7480	13042	15000
2400	1950	4110	6200	2627	5114	7371	6046	11039	14551	6089	11039	14551
2700	1570	3390	5250	2157	4300	6269	4779	9340	12695	4813	9474	12695
3000	1290	2840	4490	1799	3666	5420	3844	6799	9712	3872	8118	11201
3300	1080	2410	3880	1523	3166	4769	3136	5251	7575	3159	6605	9976
3600	920	2060	3380	1304	2758	4229	2487	4060	5908	2595	5397	8947
3900	790	1790	2970	1128	2422	3775	1984	3237	4710	2140	4418	7361
4200	680	1550	2630	985	2142	3389	1614	2630	3827	1819	3728	6231
4500	600	1360	2350	866	1906	3058	1321	2150	3129	1549	3149	5273
4800		1190	2100	768	1706	2772	1115	1812	2637	1318	2653	4445
5100		1060	1900	685	1535	2523	940	1517	2252	1149	2297	3861
5400		940	1720	615	1388	2305	798	1261	2002	1005	1996	3365
5700		840	1560	555	1261	2114	696	1088	1738	878	1732	2927
6000		760	1420	503	1149	1945	615	959	1482	778	1523	2584
6300		680	1300	458	1052	1795	585	857	1285	694	1349	2299
6600		620	1200	419	966	1660	559	767	1115	618	1193	2043
6900			1100		890	1480		692	976		1064	1824
7200			1010		809	1300		618	859		961	1641
7500			940		703	1134		547	757		867	1474
7800			860			1028			675			1327
8100			800			931			602			1208
8400			740			841			540			1100
8700			680			756			486			1000
9000			640			678			438			920











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5054	7629	9802	3060	4622	6352	5054	7629	9802
1800	4756	7076	9116	2879	4349	5977	4756	7076	9116
2100	4482	6553	8562	2736	4131	5677	4482	6553	8562
2400	4203	6132	8103	2617	3950	5429	4203	6132	8103
2700	3972	5802	7715	2517	3800	5221	3972	5802	7715
3000	3775	5531	7368	2431	3671	5042	3775	5531	7368
3300	3606	5295	7048	2342	3552	4886	3606	5295	7048
3600	3456	5087	6768	2228	3381	4749	3456	5087	6768
3900	3320	4898	6518	2133	3233	4535	3320	4898	6518
4200	3200	4725	6296	2045	3096	4353	3200	4725	6296
4500	3091	4570	6096	1964	2977	4184	3091	4570	6096
4800	2993	4428	5931	1889	2868	4034	2993	4428	5931
5100	2904	4300	5798	1826	2771	3895	2904	4300	5798
5400	2822	4181	5673	1766	2683	3764	2822	4181	5673
5700	2747	4073	5557	1711	2599	3650	2747	4073	5557
6000	2677	3972	5449	1658	2521	3540	2677	3972	5449
6300	2612	3879	5347	1616	2446	3444	2612	3879	5347
6600	2552	3792	5250	1570	2382	3354	2552	3792	5250
6900	2496	3710	5159		2321	3267	2496	3710	5159
7200	2444	3634	5073		2264	3186	2444	3634	5073
7500	2394	3562	4991		2208	3107	2394	3562	4991
7800	2348	3493	4902			3033	2348	3493	4902
8100	2304	3428	4818			2968	2304	3428	4818
8400	2262	3366	4739			2906	2262	3366	4739
8700	2223	3307	4663			2901	2223	3307	4663
9000	2186	3252	4591			2929	2186	3252	4591
FBO				558	805	930			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	No Intermediate Purlins
932	
1087	
1242	
1398	
1553	
1708	
1863	
2019	
2174	
2329	
2485	
2640	
2795	
2951	
3106	
3261	
3416	
3572	
3727	
3882	
4038	
4193	
4348	
4503	
4659	

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.75	0.85	0.49
	0.43	0.61	0.18
	0.30	0.43	0.00

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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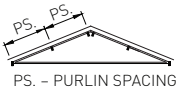
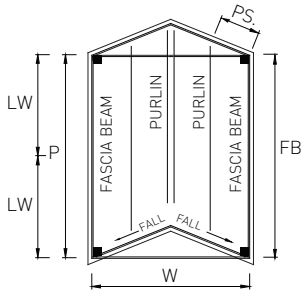
Maximum Load Width of Frames

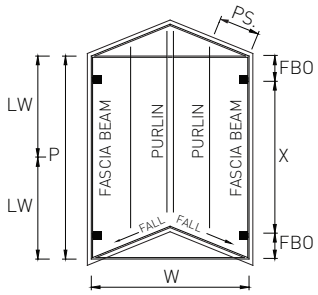
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1200mm

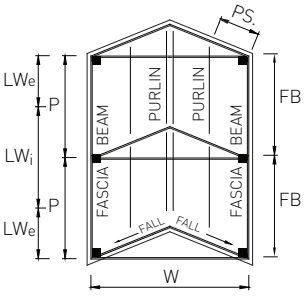
Maximum Allowable Awning Frame Load Width, LW (mm)

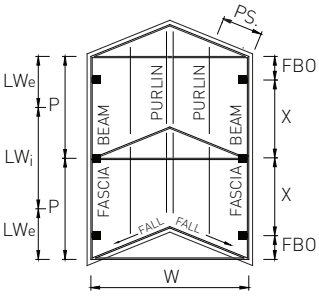
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	4360	8270	11440	5402	9565	13206	11796	15000	15000	11796	15000	15000
1800	3220	6380	9090	4140	7607	10712	9272	15000	15000	9272	15000	15000
2100	2470	5070	7430	3260	6177	8800	7480	13042	15000	7480	13042	15000
2400	1950	4130	6340	1983	4136	6113	6168	11138	14950	6168	11138	14950
2700	1570	3410	5360	1599	3452	5173	5152	9340	13006	5152	9549	13006
3000	1300	2860	4580	1316	2919	4450	4158	6799	9712	4361	8279	11444
3300	1080	2420	3960	1101	2456	3894	3213	5251	7575	3695	7244	10163
3600	920	2080	3450	935	2095	3435	2487	4060	5908	3137	6389	9094
3900	790	1800	3040	803	1808	3051	1984	3237	4710	2694	5674	8192
4200	680	1570	2690	697	1576	2726	1614	2630	3827	2334	5071	7437
4500	600	1390	2390	611	1386	2449	1321	2150	3129	2040	4527	6781
4800		1230	2160	548	1252	2230	1115	1812	2637	1868	4128	6284
5100		1100	1950	488	1118	2022	940	1517	2252	1664	3742	5767
5400		990	1760	437	1004	1834	798	1261	2002	1491	3379	5310
5700		890	1600	394	907	1659	696	1088	1738	1344	3051	4904
6000		810	1460	357	823	1509	615	959	1482	1216	2766	4297
6300		740	1340	324	750	1378	585	857	1285	1105	2516	3819
6600		670	1230	297	687	1263	559	767	1115	1009	2298	3386
6900			1130		631	1162		692	976		2047	2992
7200			1050		588	1087		618	859		1824	2673
7500			970		544	1007		547	757		1638	2401
7800			900			935			675			2150
8100			840			871			602			1933
8400			790			813			540			1760
8700			730			761			486			1600
9000			690			713			438			1450











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5054	7629	9802	3061	4621	6354	5054	7629	9802
1800	4756	7076	9116	2880	4348	5975	4756	7076	9116
2100	4482	6553	8562	2734	4130	5675	4482	6553	8562
2400	5692	8593	11242	2618	3951	5428	4009	5854	7778
2700	5472	8262	10753	2516	3799	5219	3788	5548	7392
3000	5284	7977	10327	2430	3670	5041	3601	5288	7038
3300	5118	7727	9950	2345	3556	4884	3436	5061	6732
3600	4972	7506	9615	2232	3384	4747	3290	4855	6463
3900	4841	7267	9313	2129	3229	4539	3161	4670	6225
4200	4723	7004	9040	2042	3100	4349	3046	4505	6012
4500	4616	6767	8791	1960	2981	4180	2943	4356	5857
4800	5171	7807	10071	1893	2872	4030	3672	5387	7173
5100	5068	7651	9834	1829	2768	3892	3566	5240	6974
5400	4972	7506	9615	1770	2680	3768	3468	5104	6790
5700	4883	7362	9410	1714	2596	3653	3376	4977	6620
6000	4800	7176	9219	1662	2517	3544	3290	4855	6463
6300	4723	7004	9040	1613	2449	3440	3211	4741	6317
6600	4650	6843	8872	1573	2386	3350	3137	4636	6181
6900	4548	6694	8713		2324	3264	3068	4536	6053
7200	4835	7506	9615		2261	3182	3262	5104	6790
7500	4737	7405	9460		2212	3110	3196	5009	6661
7800	4645	7260	9313			3037	3133	4911	6540
8100	4557	7124	9174			2971	3074	4819	6425
8400	4475	6995	9040			2902	3019	4732	6317
8700	4399	6876	8913			2903	2967	4651	6214
9000	4324	6760	8791			2928	2917	4573	6116
FBO				559	804	929			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	0
932	0
1087	0
621	1
698	1
776	1
854	1
931	1
1009	1
1087	1
1164	1
828	2
879	2
931	2
983	2
1035	2
1087	2
1138	2
1190	2
931	3
970	3
1009	3
1048	3
1087	3
1125	3
1164	3

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.76	0.85	0.49
	0.43	0.64	0.19
	0.30	0.54	0.00

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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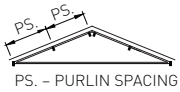
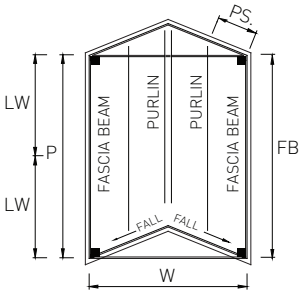
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1800mm

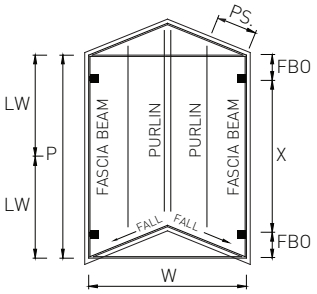
Maximum Load Width of Frames

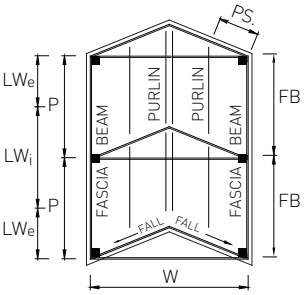
Maximum Allowable Awning Frame Load Width, LW (mm)												
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	4360	8270	11440	5402	9565	13206	11796	15000	15000	11796	15000	15000
1800	3220	6380	9090	4140	7607	10712	9272	15000	15000	9272	15000	15000
2100	2470	5070	7430	3260	6177	8800	7480	13042	15000	7480	13042	15000
2400	1950	4110	6200	2627	5114	7371	6046	11039	14551	6089	11039	14551
2700	1570	3390	5250	2157	4300	6269	4779	9340	12695	4813	9474	12695
3000	1290	2840	4490	1799	3666	5420	3844	6799	9712	3872	8118	11201
3300	1080	2410	3880	1523	3166	4769	3136	5251	7575	3159	6605	9976
3600	920	2080	3450	935	2095	3435	2487	4060	5908	3137	6389	9094
3900	790	1800	3040	803	1808	3051	1984	3237	4710	2694	5674	8192
4200	680	1570	2690	697	1576	2726	1614	2630	3827	2334	5071	7437
4500	600	1390	2390	611	1386	2449	1321	2150	3129	2040	4527	6781
4800		1230	2140	540	1228	2212	1115	1812	2637	1797	3991	6207
5100		1100	1930	481	1095	1984	940	1517	2252	1593	3540	5701
5400		980	1740	430	983	1784	798	1261	2002	1420	3157	5253
5700		890	1580	388	887	1613	696	1088	1738	1272	2828	4853
6000		800	1440	351	803	1461	615	959	1482	1145	2544	4297
6300		730	1320	319	730	1329	585	857	1285	1036	2298	3819
6600		670	1210	291	667	1213	559	767	1115	940	2081	3386
6900			1110		611	1111		692	976		1889	2992
7200			1040		581	1072		618	859		1824	2673
7500			970		538	993		547	757		1638	2401
7800			900			922			675			2150
8100			830			858			602			1933
8400			780			800			540			1760
8700			730			748			486			1600
9000			680			700			438			1450

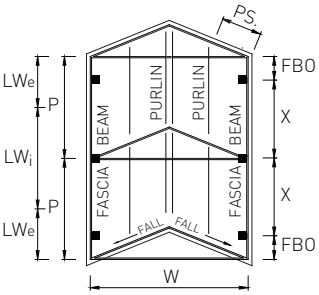


PS. – PURLIN SPACING









Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)										Purlin Details	
W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Max. Purlin Spacing (mm)	Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	5054	7629	9802	3060	4622	6352	5054	7629	9802	776	0
1800	4756	7076	9116	2879	4349	5977	4756	7076	9116	932	0
2100	4482	6553	8562	2736	4131	5677	4482	6553	8562	1087	0
2400	4203	6132	8103	2617	3950	5429	4203	6132	8103	1242	0
2700	3972	5802	7715	2517	3800	5221	3972	5802	7715	1398	0
3000	3775	5531	7368	2431	3671	5042	3775	5531	7368	1553	0
3300	3606	5295	7048	2342	3552	4886	3606	5295	7048	1708	0
3600	4972	7506	9615	2228	3381	4749	3290	4855	6463	931	1
3900	4841	7267	9313	2133	3233	4535	3161	4670	6225	1009	1
4200	4723	7004	9040	2045	3096	4353	3046	4505	6012	1087	1
4500	4616	6767	8791	1964	2977	4184	2943	4356	5857	1164	1
4800	4482	6553	8562	1889	2868	4034	2849	4221	5716	1242	1
5100	4353	6358	8352	1826	2771	3895	2764	4098	5585	1319	1
5400	4235	6180	8157	1766	2683	3764	2686	3986	5464	1397	1
5700	4127	6016	7975	1711	2599	3650	2615	3882	5350	1475	1
6000	4026	5877	7806	1658	2521	3540	2549	3786	5244	1552	1
6300	3933	5748	7648	1616	2446	3444	2487	3697	5145	1630	1
6600	3846	5628	7499	1570	2382	3354	2430	3614	5051	1708	1
6900	3762	5515	7346		2321	3267	2377	3536	4957	1785	1
7200	1827	6553	8562		2264	3186	2834	4444	5947	1242	2
7500	1790	6421	8420		2208	3107	2777	4356	5857	1294	2
7800	1755	6298	8285			3033	2723	4273	5771	1345	2
8100	1722	6180	8157			2968	2672	4192	5689	1397	2
8400	1691	6068	8034			2906	2624	4117	5610	1449	2
8700	1662	5962	7918			2901	2578	4045	5535	1501	2
9000	1634	5863	7806			2929	2535	3978	5464	1552	2
FBO				558	805	930					

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.75	0.85	0.49
	0.43	0.64	0.18
	0.30	0.47	0.00

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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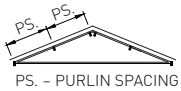
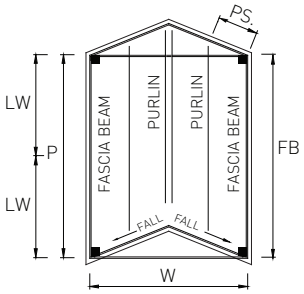
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 2400mm

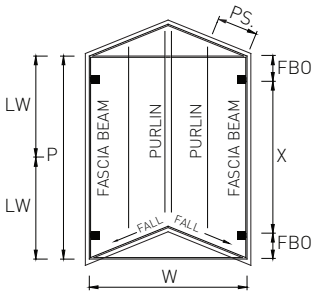
Maximum Load Width of Frames

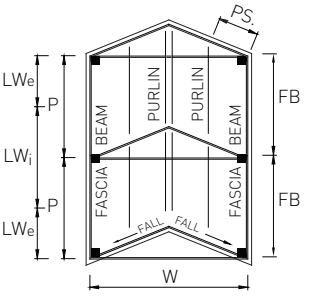
Maximum Allowable Awning Frame Load Width, LW (mm)

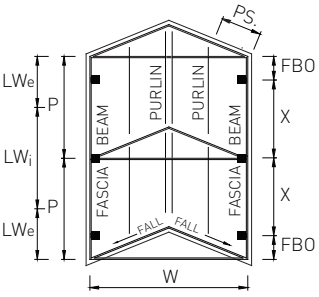
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	4360	8270	11440	5402	9565	13206	11796	15000	15000	11796	15000	15000
1800	3220	6380	9090	4140	7607	10712	9272	15000	15000	9272	15000	15000
2100	2470	5070	7430	3260	6177	8800	7480	13042	15000	7480	13042	15000
2400	1950	4110	6200	2627	5114	7371	6046	11039	14551	6089	11039	14551
2700	1570	3390	5250	2157	4300	6269	4779	9340	12695	4813	9474	12695
3000	1290	2840	4490	1799	3666	5420	3844	6799	9712	3872	8118	11201
3300	1080	2410	3880	1523	3166	4769	3136	5251	7575	3159	6605	9976
3600	920	2060	3380	1304	2758	4229	2487	4060	5908	2595	5397	8947
3900	790	1790	2970	1128	2422	3775	1984	3237	4710	2140	4418	7361
4200	680	1550	2630	985	2142	3389	1614	2630	3827	1819	3728	6231
4500	600	1360	2350	866	1906	3058	1321	2150	3129	1549	3149	5273
4800		1230	2140	540	1228	2212	1115	1812	2637	1797	3991	6207
5100		1100	1930	481	1095	1984	940	1517	2252	1593	3540	5701
5400		980	1740	430	983	1784	798	1261	2002	1420	3157	5253
5700		890	1580	388	887	1613	696	1088	1738	1272	2828	4853
6000		800	1440	351	803	1461	615	959	1482	1145	2544	4297
6300		730	1320	319	730	1329	585	857	1285	1036	2298	3819
6600		670	1210	291	667	1213	559	767	1115	940	2081	3386
6900			1110		611	1111		692	976		1889	2992
7200			1030		562	1021		618	859		1717	2673
7500			950		518	941		547	757		1562	2401
7800			880			869			675			2150
8100			820			804			602			1933
8400			770			746			540			1760
8700			720			694			486			1600
9000			670			647			438			1450











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	5054	7629	9802	3060	4622	6352	5054	7629	9802
1800	4756	7076	9116	2879	4349	5977	4756	7076	9116
2100	4482	6553	8562	2736	4131	5677	4482	6553	8562
2400	4203	6132	8103	2617	3950	5429	4203	6132	8103
2700	3972	5802	7715	2517	3800	5221	3972	5802	7715
3000	3775	5531	7368	2431	3671	5042	3775	5531	7368
3300	3606	5295	7048	2342	3552	4886	3606	5295	7048
3600	3456	5087	6768	2228	3381	4749	3456	5087	6768
3900	3320	4898	6518	2133	3233	4535	3320	4898	6518
4200	3200	4725	6296	2045	3096	4353	3200	4725	6296
4500	3091	4570	6096	1964	2977	4184	3091	4570	6096
4800	4482	6553	8562	1889	2868	4034	2849	4221	5716
5100	4353	6358	8352	1826	2771	3895	2764	4098	5585
5400	4235	6180	8157	1766	2683	3764	2686	3986	5464
5700	4127	6016	7975	1711	2599	3650	2615	3882	5350
6000	4026	5877	7806	1658	2521	3540	2549	3786	5244
6300	3933	5748	7648	1616	2446	3444	2487	3697	5145
6600	3846	5628	7499	1570	2382	3354	2430	3614	5051
6900	3762	5515	7346		2321	3267	2377	3536	4957
7200	3682	5409	7203		2264	3186	2327	3466	4861
7500	3607	5309	7067		2208	3107	2279	3403	4771
7800	3538	5206	6939			3033	2236	3337	4686
8100	3471	5109	6818			2968	2194	3274	4606
8400	3409	5016	6703			2906	2154	3215	4529
8700	3350	4930	6593			2901	2117	3160	4457
9000	3293	4846	6489			2929	2081	3106	4388
FBO				558	805	930			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
776	0
932	0
1087	0
1242	0
1398	0
1553	0
1708	0
1863	0
2019	0
2174	0
2329	0
1242	1
1319	1
1397	1
1475	1
1552	1
1630	1
1708	1
1785	1
1863	1
1941	1
2018	1
2096	1
2174	1
2251	1
2329	1

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.75	0.85	0.49
	0.43	0.58	0.18
	0.30	0.41	0.00

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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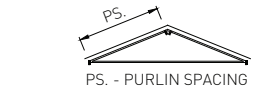
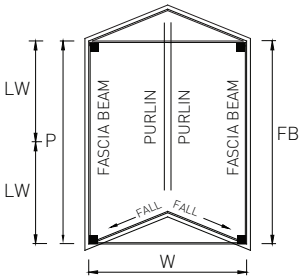
Roof Sheet - Long Spanning
No Intermediate Purlins

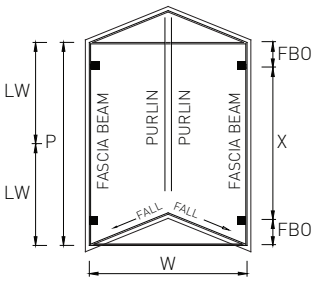
Maximum Load Width of Frames

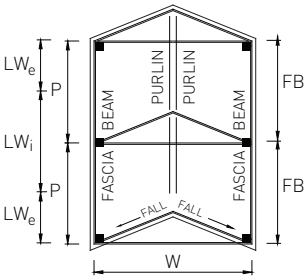
Maximum Allowable Awning Frame Load Width, LW (mm)

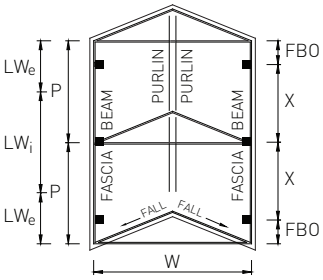
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	4070	7810	10880	5091	9092	12612	8999	14917	15000	8887	14632	15000
1800	3000	6010	8620	3885	7198	10166	7049	12032	15000	6985	11827	15000
2100	2300	4750	7040	3049	5828	8332	5669	9976	13004	5636	9826	12740
2400	1810	3840	5850	2450	4813	6965	4651	8425	11171	4637	8317	10957
2700	1460	3160	4940	2008	4037	5911	3877	7214	9732	3875	7136	9558
3000	1200	2640	4220	1673	3439	5128	3119	6246	8577	3151	6192	8436
3300	1000	2240	3640	1413	2964	4505	2541	5412	7627	2567	5422	7512
3600	850	1910	3160	1209	2578	3988	2083	4406	6830	2103	4452	6736
3900	730	1650	2780	1045	2260	3554	1744	3657	6148	1759	3694	6083
4200	630	1430	2460	911	1996	3185	1480	3075	5122	1492	3105	5260
4500	550	1250	2190	801	1774	2870	1258	2586	4188	1268	2611	4429
4800		1100	1960	710	1586	2598	1085	2209	3530	1093	2230	3793
5100		970	1760	633	1426	2362	946	1912	3014	953	1930	3294
5400		860	1590	568	1288	2156	826	1655	2680	831	1670	2859
5700		760	1450	512	1169	1975	728	1446	2326	732	1459	2506
6000		680	1320	464	1065	1815	648	1276	1983	652	1287	2223
6300		610	1210	422	974	1673	577	1126	1720	580	1135	1970
6600		550	1110	386	894	1546	516	1002	1493	519	1010	1754
6900			1010		823	1433		902	1306		909	1572
7200			920		760	1331		812	1150		818	1408
7500			840		704	1239		733	1014		739	1266
7800			770			1156			904			1150
8100			710			1080			806			1044
8400			650			1011			722			949
8700			600			949			650			871
9000			560			892			586			799











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Purlin Details: Max. Purlin Spacing (mm)	Purlin Details: Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	4549	6656	8672	2829	4271	5868	4549	6656	8672	812	No Intermediate Purlins
1800	4168	6078	8044	2662	4017	5523	4168	6078	8044	974	
2100	3870	5662	7541	2531	3819	5245	3870	5662	7541	1137	
2400	3629	5327	7092	2421	3654	5021	3629	5327	7092	1299	
2700	3426	5046	6712	2299	3479	4829	3426	5046	6712	1461	
3000	3250	4797	6389	2166	3282	4607	3250	4797	6389	1624	
3300	3099	4580	6110	2051	3108	4361	3099	4580	6110	1786	
3600	2967	4391	5892	1945	2956	4150	2967	4391	5892	1948	
3900	2850	4223	5717	1862	2823	3968	2850	4223	5717	2111	
4200	2747	4073	5558	1785	2705	3801	2747	4073	5558	2273	
4500	2654	3938	5412	1711	2596	3650	2654	3938	5412	2435	
4800	2569	3816	5277	1651	2501	3515	2569	3816	5277	2598	
5100	2493	3705	5153	1593	2416	3397	2493	3705	5153	2760	
5400	2422	3603	5038	1538	2332	3284	2422	3603	5038	2922	
5700	2358	3509	4921	1539	2257	3177	2358	3509	4921	3085	
6000	2298	3428	4807	1554	2193	3084	2298	3428	4807	3247	
6300	2243	3353	4701	1569	2208	3123	2243	3353	4701	3410	
6600	2191	3283	4601	1588	2230	3167	2191	3283	4601	3572	
6900	2143	3217	4508		2255	3215	2143	3217	4508	3734	
7200	2098	3155	4420		2284	3278	2098	3155	4420	3897	
7500	2055	3097	4338		2315	3347	2055	3097	4338	4059	
7800	2016	3037	4260			3390	2016	3037	4260	4221	
8100	1978	2980	4186			3346	1978	2980	4186	4384	
8400	1942	2926	4116			3306	1942	2926	4116	4546	
8700	1908	2875	4049			3269	1908	2875	4049	4708	
9000	1876	2827	3986			3234	1876	2827	3986	4871	
FBO				439	627	440					

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.85	0.96	1.00
	0.55	0.73	0.34
	0.43	0.57	0.15

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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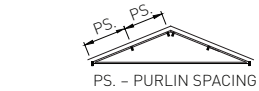
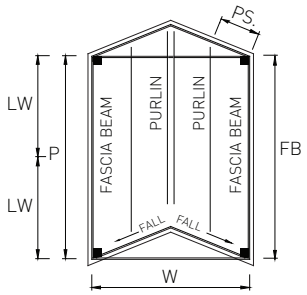
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1200mm

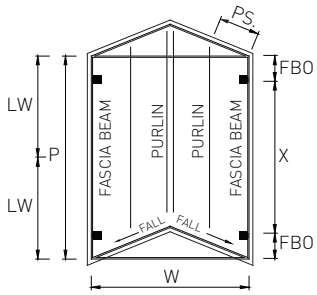
Maximum Load Width of Frames

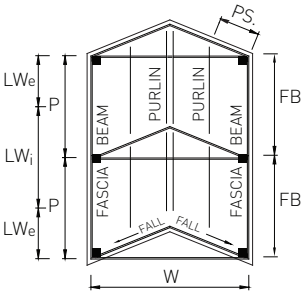
Maximum Allowable Awning Frame Load Width, LW (mm)

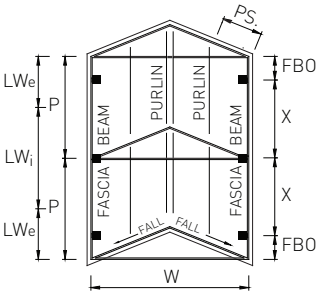
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	4070	7810	10880	5091	9092	12612	8999	14917	15000	8887	14632	15000
1800	3000	6010	8620	3885	7198	10166	7049	12032	15000	6985	11827	15000
2100	2300	4750	7040	3049	5828	8332	5669	9976	13004	5636	9826	12740
2400	1810	3860	5980	1917	3881	5766	4660	8497	11465	4647	8389	11248
2700	1460	3180	5040	1561	3232	4868	3883	7269	9960	3881	7192	9783
3000	1200	2660	4300	1287	2735	4200	3279	6289	8751	3285	6235	8607
3300	1000	2250	3710	1072	2343	3668	2802	5492	7760	2813	5456	7642
3600	850	1930	3230	907	2027	3230	2419	4835	6934	2432	4811	6838
3900	730	1670	2840	777	1769	2864	2106	4287	6248	2122	4274	6169
4200	630	1460	2510	673	1556	2555	1822	3520	5122	1847	3820	5599
4500	550	1280	2230	589	1367	2293	1590	2878	4188	1612	3432	5105
4800		1140	2010	524	1225	2084	1444	2425	3530	1466	3109	4728
5100		1020	1810	466	1091	1888	1258	2030	3014	1304	2818	4338
5400		910	1640	417	977	1717	1068	1688	2680	1167	2565	3994
5700		820	1480	375	881	1567	931	1456	2326	1050	2344	3691
6000		740	1350	339	798	1436	823	1284	1983	949	2149	3421
6300		680	1240	308	726	1320	784	1147	1720	862	1977	3179
6600		620	1130	282	664	1218	748	1027	1493	786	1816	2960
6900			1040		609	1126		926	1306		1663	2762
7200			970		565	1048		827	1150		1569	2602
7500			900		522	974		733	1014		1453	2438
7800			830			908			904			2288
8100			780			846			806			2151
8400			720			789			722			1980
8700			680			737			650			1793
9000			630			690			586			1619











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	4549	6656	8672	2828	4269	5869	4549	6656	8672
1800	4168	6078	8044	2663	4019	5521	4168	6078	8044
2100	3870	5662	7541	2529	3818	5247	3870	5662	7541
2400	5173	7810	10002	2420	3653	5019	3463	5097	6781
2700	4974	7496	9548	2295	3483	4830	3265	4819	6417
3000	4802	7113	9154	2162	3278	4603	3098	4579	6108
3300	4633	6784	8808	2047	3105	4365	2953	4371	5872
3600	4444	6496	8501	1949	2952	4154	2828	4190	5682
3900	4277	6242	8225	1858	2820	3965	2717	4030	5511
4200	4127	6016	7976	1781	2702	3798	2618	3886	5355
4500	4802	7113	9154	1715	2599	3654	3265	4819	6417
4800	4700	6888	8919	1647	2504	3519	3161	4670	6226
5100	4567	6684	8702	1590	2413	3394	3067	4535	6051
5400	4444	6496	8501	1535	2335	3280	2981	4411	5913
5700	4330	6324	8314	1538	2260	3181	2901	4296	5794
6000	4225	6164	8139	1554	2190	3085	2828	4190	5682
6300	4127	6016	7976	1570	2207	3121	2759	4091	5577
6600	4036	5890	7822	1589	2231	3165	2696	4000	5479
6900	4289	6635	8650		2256	3217	2865	4503	6010
7200	4197	6496	8501		2283	3276	2804	4411	5913
7500	4114	6365	8359		2313	3344	2748	4324	5823
7800	4033	6240	8225			3388	2694	4239	5737
8100	3959	6125	8097			3344	2645	4161	5656
8400	3887	6014	7976			3304	2597	4085	5577
8700	3818	5908	7860			3267	2551	4013	5503
9000	4003	6195	8501			3231	2675	4208	5913
FBO				438	629	443			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
812	0
974	0
1137	0
649	1
730	1
811	1
892	1
974	1
1055	1
1136	1
811	2
865	2
920	2
974	2
1028	2
1082	2
1136	2
1190	2
933	3
974	3
1014	3
1055	3
1095	3
1136	3
1177	3
974	4

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.88	0.96	1.00
	0.57	0.77	0.34
	0.45	0.68	0.14

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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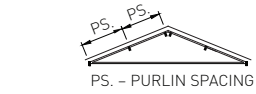
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 1800mm

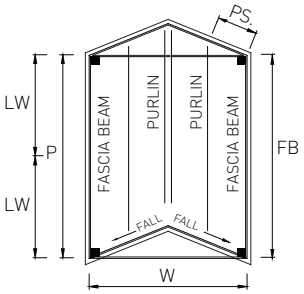
Maximum Load Width of Frames

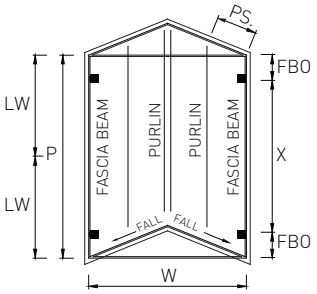
Maximum Allowable Awning Frame Load Width, LW (mm)

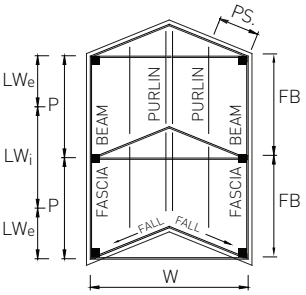
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	4070	7810	10880	5091	9092	12612	8999	14917	15000	8887	14632	15000
1800	3000	6010	8620	3885	7198	10166	7049	12032	15000	6985	11827	15000
2100	2300	4750	7040	3049	5828	8332	5669	9976	13004	5636	9826	12740
2400	1810	3840	5850	2450	4813	6965	4651	8425	11171	4637	8317	10957
2700	1460	3160	4940	2008	4037	5911	3877	7214	9732	3875	7136	9558
3000	1200	2640	4220	1673	3439	5128	3119	6246	8577	3151	6192	8436
3300	1000	2240	3640	1413	2964	4505	2541	5412	7627	2567	5422	7512
3600	850	1930	3230	907	2027	3230	2419	4835	6934	2432	4811	6838
3900	730	1670	2840	777	1769	2864	2106	4287	6248	2122	4274	6169
4200	630	1460	2510	673	1556	2555	1822	3520	5122	1847	3820	5599
4500	550	1280	2230	589	1367	2293	1590	2878	4188	1612	3432	5105
4800		1140	1990	519	1208	2067	1399	2425	3530	1418	3098	4672
5100		1010	1790	461	1075	1872	1239	2030	3014	1256	2808	4291
5400		910	1620	412	962	1703	1068	1688	2680	1119	2528	3953
5700		820	1460	371	866	1555	931	1456	2326	1003	2263	3653
6000		740	1330	335	783	1425	823	1284	1983	903	2035	3384
6300		670	1220	304	711	1309	784	1147	1720	816	1837	3143
6600		620	1120	278	649	1201	730	1027	1493	740	1662	2925
6900			1030		594	1098		926	1306		1507	2666
7200			960		560	1044		827	1150		1528	2583
7500			890		518	971		733	1014		1408	2419
7800			830			900			904			2270
8100			770			837			806			2133
8400			720			779			722			1980
8700			670			727			650			1793
9000			630			680			586			1619

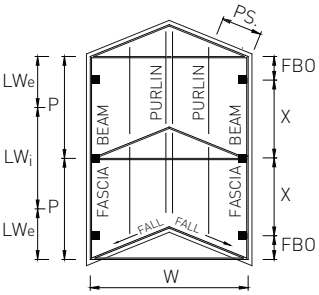


PS. – PURLIN SPACING









Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	4549	6656	8672	2829	4271	5868	4549	6656	8672
1800	4168	6078	8044	2662	4017	5523	4168	6078	8044
2100	3870	5662	7541	2531	3819	5245	3870	5662	7541
2400	3629	5327	7092	2421	3654	5021	3629	5327	7092
2700	3426	5046	6712	2299	3479	4829	3426	5046	6712
3000	3250	4797	6389	2166	3282	4607	3250	4797	6389
3300	3099	4580	6110	2051	3108	4361	3099	4580	6110
3600	4444	6496	8501	1945	2956	4150	2828	4190	5682
3900	4277	6242	8225	1862	2823	3968	2717	4030	5511
4200	4127	6016	7976	1785	2705	3801	2618	3886	5355
4500	3992	5830	7749	1711	2596	3650	2529	3758	5213
4800	3870	5662	7541	1651	2501	3515	2449	3641	5082
5100	3759	5507	7336	1593	2416	3397	2376	3535	4955
5400	3657	5365	7144	1538	2332	3284	2309	3442	4827
5700	3562	5234	6966	1539	2257	3177	2247	3359	4709
6000	3474	5112	6801	1554	2193	3084	2190	3282	4600
6300	3391	4999	6648	1569	2208	3123	2137	3210	4498
6600	3313	4887	6504	1588	2230	3167	2088	3142	4402
6900	1607	5772	7678		2255	3215	2489	3914	5385
7200	1573	5662	7541		2284	3278	2437	3833	5297
7500	1542	5557	7404		2315	3347	2388	3758	5213
7800	1511	5448	7270			3390	2340	3684	5133
8100	1483	5346	7144			3346	2297	3615	5057
8400	1456	5250	7024			3306	2255	3550	4982
8700	1431	5159	6910			3269	2216	3488	4903
9000	1407	5072	6801			3234	2179	3430	4827
FBO				439	627	440			

Purlin Details

Max. Purlin Spacing (mm)	Intermediate Purlins
PS	No. of
812	0
974	0
1137	0
1299	0
1461	0
1624	0
1786	0
974	1
1055	1
1136	1
1217	1
1298	1
1380	1
1461	1
1542	1
1623	1
1704	1
1785	1
1244	2
1298	2
1352	2
1407	2
1461	2
1515	2
1569	2
1623	2

Optional Awning Arrangements

Awning Type	Reduction Factors		
	LW	FB/X/P	FBO
	0.88	0.96	1.00
	0.57	0.76	0.34
	0.45	0.65	0.15

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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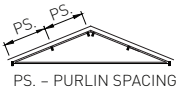
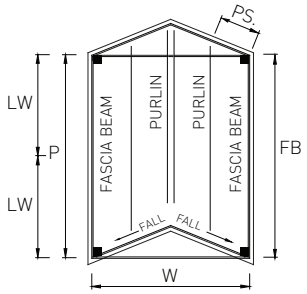
Roof Sheet - Short Spanning
Maximum Purlin Spacing - 2400mm

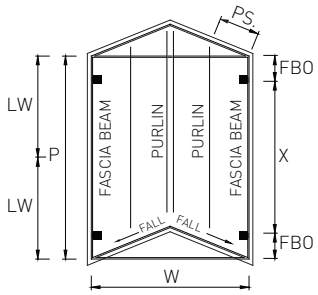
Maximum Load Width of Frames

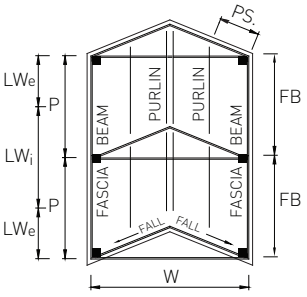
Maximum Allowable Awning Frame Load Width, LW (mm)

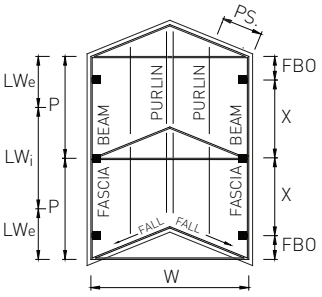
W	Rafter Frame			Collar Tie Frame			No Web Truss			King Post Truss		
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20
1500	4070	7810	10880	5091	9092	12612	8999	14917	15000	8887	14632	15000
1800	3000	6010	8620	3885	7198	10166	7049	12032	15000	6985	11827	15000
2100	2300	4750	7040	3049	5828	8332	5669	9976	13004	5636	9826	12740
2400	1810	3840	5850	2450	4813	6965	4651	8425	11171	4637	8317	10957
2700	1460	3160	4940	2008	4037	5911	3877	7214	9732	3875	7136	9558
3000	1200	2640	4220	1673	3439	5128	3119	6246	8577	3151	6192	8436
3300	1000	2240	3640	1413	2964	4505	2541	5412	7627	2567	5422	7512
3600	850	1910	3160	1209	2578	3988	2083	4406	6830	2103	4452	6736
3900	730	1650	2780	1045	2260	3554	1744	3657	6148	1759	3694	6083
4200	630	1430	2460	911	1996	3185	1480	3075	5122	1492	3105	5260
4500	550	1250	2190	589	1367	2293	1258	2586	4188	1268	2611	4429
4800		1140	1990	519	1208	2067	1399	2425	3530	1418	3098	4672
5100		1010	1790	461	1075	1872	1239	2030	3014	1256	2808	4291
5400		910	1620	412	962	1703	1068	1688	2680	1119	2528	3953
5700		820	1460	371	866	1555	931	1456	2326	1003	2263	3653
6000		740	1330	335	783	1425	823	1284	1983	903	2035	3384
6300		670	1220	304	711	1309	784	1147	1720	816	1837	3143
6600		620	1120	278	649	1201	730	1027	1493	740	1662	2925
6900			1030		594	1098		926	1306		1507	2666
7200			950		546	1008		827	1150		1369	2414
7500			880		503	928		733	1014		1248	2198
7800			810			857			904			2022
8100			760			793			806			1863
8400			710			735			722			1718
8700			660			684			650			1585
9000			620			637			586			1463











Maximum Span of Roof Beams

Maximum Allowable Roof Beam Spans (mm)

W	Fascia Beam Span FB			Posts Spacing X			Purlin Span P			Purlin Details: Max. Purlin Spacing (mm)	Purlin Details: Intermediate Purlins
	100-12	150-16	200-20	100-12	150-16	200-20	100-12	150-16	200-20	PS	No. of
1500	4549	6656	8672	2829	4271	5868	4549	6656	8672	812	0
1800	4168	6078	8044	2662	4017	5523	4168	6078	8044	974	0
2100	3870	5662	7541	2531	3819	5245	3870	5662	7541	1137	0
2400	3629	5327	7092	2421	3654	5021	3629	5327	7092	1299	0
2700	3426	5046	6712	2299	3479	4829	3426	5046	6712	1461	0
3000	3250	4797	6389	2166	3282	4607	3250	4797	6389	1624	0
3300	3099	4580	6110	2051	3108	4361	3099	4580	6110	1786	0
3600	2967	4391	5892	1945	2956	4150	2967	4391	5892	1948	0
3900	2850	4223	5717	1862	2823	3968	2850	4223	5717	2111	0
4200	2747	4073	5558	1785	2705	3801	2747	4073	5558	2273	0
4500	3992	5830	7749	1711	2596	3650	2529	3758	5213	1217	1
4800	3870	5662	7541	1651	2501	3515	2449	3641	5082	1298	1
5100	3759	5507	7336	1593	2416	3397	2376	3535	4955	1380	1
5400	3657	5365	7144	1538	2332	3284	2309	3442	4827	1461	1
5700	3562	5234	6966	1539	2257	3177	2247	3359	4709	1542	1
6000	3474	5112	6801	1554	2193	3084	2190	3282	4600	1623	1
6300	3391	4999	6648	1569	2208	3123	2137	3210	4498	1704	1
6600	3313	4887	6504	1588	2230	3167	2088	3142	4402	1785	1
6900	3239	4783	6370		2255	3215	2042	3079	4313	1867	1
7200	3171	4685	6244		2284	3278	1999	3020	4228	1948	1
7500	3107	4593	6126		2315	3347	1959	2964	4149	2029	1
7800	3047	4504	6014			3390	1921	2906	4074	2110	1
8100	2990	4420	5927			3346	1885	2852	4003	2191	1
8400	2936	4340	5847			3306	1851	2800	3936	2273	1
8700	2885	4264	5770			3269	1819	2751	3872	2354	1
9000	1407	2080	6801			3234	2173	3288	4827	1623	2
FBO				439	627	440					

Optional Awning Arrangements

Awning Type	Reduction Factors LW	FB/X/P	FBO
	0.88	0.96	1.00
	0.57	0.72	0.34
	0.45	0.56	0.15

Notes: 1. Span Tables are to be read in conjunction with COLORBEAM™ Pitched Roof Span Tables. PRO-1.1 February 2008. **2.** Spacing and span values for intermediate awning widths (W) can be linearly interpolated. **3.** Intermediate purlins shall be evenly spaced along the top chord (rafter).

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SPANTEC™

THINKING FOR THE BUILDER

SPANTEC SYSTEMS PTY LTD

17 Drapers Road, Braemar (Mittagong) NSW 2575
Phone: (02) 4860 1000 Fax: (02) 4872 1616
Email: sales@spantec.com.au Website: www.spantec.com.au

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