STRATCO NZ SPAN TABLES

FLAT PATIOS AND CARPORTS

STRATCO PATIOS & CARPORTS

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210853/S/1

2 November 2021

Stratco (NZ) Ltd
55 Hands Road
Middleton
CHRISTCHURCH 8440

Powell Fenwick

P 03 366 1777
W www.pfc.co.nz

383 Colombo St, Sydenham,
Christchurch

PO Box 7110, Sydenham 8240
Christchurch

RE: STRATCO SPAN TABLES FOR FLAT PATIOS & CARPORTS

We, Powell Fenwick, confirm that we have checked the designs prepared by Stratco (Australia) PTY LTD., for the Stratco flat roof verandahs, patios and carports, as detailed in the following manual.

Stratco Span Tables - Flat Patios & Carports

November 2021

We hereby certify that the calculations, materials, forms of construction and systems to which the designs relate will if installed in accordance with the designs, conform to the structural requirements of the New Zealand Building Code, and the following New Zealand Standards:-

NZS 3101:2006	Concrete Structures Standard
AS/NZS 4600:2005	Cold-Formed Steel Structures
NZS 3404.1 & .2:1997	Steel Structures Standard
AS/NZS 1170.0:2002	Structural Design Actions - Part 0: General Principles
AS/NZS 1170.1:2002	Structural Design Actions - Part 1: Permanent, Imposed & Other Actions
AS/NZS 1170.2:2011	Structural Design Actions - Part 2: Wind Actions
NZS 3604:2011	Timber-Framed Buildings

In the preparation of this report we have relied on the load test reports, product data sheets and specifications provided by Stratco (Australia) PTY LTD. and other relevant product specifications.

Yours faithfully,

POWELL FENWICK

Phil Paterson

Director

B.E. (Hons), CPEng 228649 (NZ), CMEngNZ (Structural), MIEAust, CPEng (Aust).

Flat

Attached

There are 4 standard designs for Flat and 'A' indicates the unit design must be 'Attached' to a building.

1A Designs are determined by the deck running perpendicular to a fascia or wall. There are no intermediate beams and the maximum span is 4500mm.

2A Designs are similar to a 1A design, however a deck overhang is included.

3A Designs are determined by the deck running parallel to the fascia or wall. These units have intermediate beam(s).

4A Designs have deck running perpendicular to a fascia or wall where the span typically exceeds the 1A or 2A tables. This style has both intermediate beams and purlins intersecting to provide additional spanning capability.

Freestanding

1F - 4F 'F' indicates that the unit is freestanding and there are the 4 standard designs as above.

1. These tables have been prepared for a range of attached and freestanding patio and carport designs using structural sections and roof sheeting manufactured by the Stratco Group of Companies.

2. The structural components used comply with the following standards:
   - Beam and Column sections are cold-rolled from hi-tensile steel, conforming to AS1397.
   - Hot rolled plate conforms to AS/NZS1594 and AS/NZS3678.
   - Roof sheeting complies with AS1397 - Steel Sheet Strip.
   - Bolts comply with AS/NZS2451, AS1110.1 and AS1111.1.
   - Self drilling screws comply with AS3566.1.
   - All other proprietary products to be in accordance with the manufacturer's recommendations.

3. The testing and design of structural members comply with the following standards:
   - Structural Design Actions, AS/NZS 1170.0:2002 - General Principles
   - Structural Design Actions, AS/NZS1170.1:2002 - Permanent, Imposed and Other Actions
   - Structural Design Actions, AS/NZS1170.2:2011 - Wind Actions
   - Timber Framed Buildings, NZS3604 - 2011.
   - Cold Formed Steel Structures, AS/NZS4600 - 2005.
   - Steel Structures, NZS3404.1 & 2 : 1997.
   - Concrete Structures, NZS3101.1 & 2 : 2006.
   - Design and Installation of Sheet Roof and Wall Cladding, AS1562.1 - 1992.

4. All erection and connection details to be in accordance with the relevant standard Stratco connection details contained in these span tables.

5. Maximum height shall be 3.0 metres for units specified as per the span tables with some units restricted in height for better performance. Refer to the height increase notes on pages 1.2-1.5, if all 3 requirements are met the allowable unit height is increased to 3.6 m. Height increase not applicable for freestanding units.

6. Recommended minimum roof pitch for "flat" verandahs shall be 3° (1 in 20). Maximum roof pitch for "flat" verandahs shall be 5° (1 in 12). Care must be taken to ensure the minimum roof pitch is maintained to avoid ponding of rainwater.

7. Unless indicated otherwise footing sizes nominated in the span tables have been determined assuming they are founded into 'good ground' as defined in NZS3604. Concrete to have a minimum strength of 17.5MPa with a maximum 80mm slump.

8. Where the Patio or Carport columns are to be fixed to an existing ground slab the erector / owner is responsible for ensuring that the slab is capable of supporting the structure.

9. Stratco Patio and Carport Span Tables are not sufficient to provide for enclosures and have been developed for open structures. For a side to be considered open, the roof cladding adjacent to that side must be at least 500mm from another building or allotment boundary.

10. The builder is to ensure that the structure to which the Patio or Carport is to be attached is capable of withstanding the additional loads imposed by the Patio or Carport and is adequately reinforced. It is advisable to first check with a structural engineer or your local government authority to determine any specific requirements for attachment to existing buildings.

11. The roof cladding and supporting structural members are designed to withstand actions incidental to maintenance, roofs are not to be used for floor type activities.

12. Stratco recommends that crawl boards be used across the roof sheeting during installation or maintenance to prevent damage to the roofing. Temporary support of beams at mid span is recommended during fixing of roof sheets.

13. Sunroof units have been designed as non-trafficable and at no stage should be walked on.

14. Generally, structural members have an allowable dead load deflection of span/150, however this has been restricted to a maximum of 25mm for aesthetic and practical purposes.

15. A Flat Patio or Carport is deemed to be freestanding unless it is attached to an existing house for at least 75% of the unit length. A Sunroof Verandah, Patio or Carport is deemed to be freestanding unless it is attached to an existing house for at least 75% of the rear attachment beam, unless indicated otherwise. Refer to the explanatory notes in the relevent section for better explanation and further attachment details.

16. For all Type 3 and 4 Flat Patio/Carport designs, both attached and freestanding, all columns must be positioned within 500mm of a beam location.

17. For all freestanding design options, any materials, goods, or vehicles stored under the unit shall not block more than 50% of the open area of any side.

18. The design contained within these span tables relate to New Zealand Wind Zones Low (L), Medium (M), High (H), Very High (VH) and Extra High (EH) applicable to Regions A & W. The tables are not applicable for areas within Lee zones or areas susceptible to snow loading. Stratco does not accept liability for any loss or damage suffered as a result of any errors in the interpretation or application of these span tables.

19. Stratco patios and carports have been designed as a complete system. Only Stratco components may be used. Any guarantee provided by Stratco will only apply if all components have been supplied by Stratco, and installed in accordance with Stratco details.

20. This booklet is produced in the interest of customer education and good consumer relations and should be read in conjunction with the Stratco Selection, Use and Maintenance brochure. Users should satisfy themselves that they are using the correct materials, approach and techniques. Correct maintenance is considered an essential part of maintaining structural integrity of Stratco Patio and Carport products.

21. Stratco takes no responsibility for any misinterpretation of the detail provided or omissions. These tables are subject to change without notice. Users should satisfy themselves they are using the most up to date information available.

22. Alternative columns to those specified in the Span Table Book may be used in accordance with the following table:

Column Specified	Optional Replacement*
Outback Column (68x68x0.6mm BMT) Outback Column reinforced with 50x50x1.6mm SHS Outback Column reinforced with 50x50x3.0mm SHS 65x65x2.5mm SHS	65x65x2.5mm SHS 75x75x2.5mm SHS 90x90x2.0mm SHS 100x100x2.5mm SHS 100x100x3.0mm SHS
75x75x2.5mm SHS 75x75x3.0mm SHS 90x90x2.0mm SHS	100x100x2.5mm SHS 100x100x3.0mm SHS

* Any replacement column listed may be used in lieu of the 'Column Specified' in the relevant section.
All SHS specified shall be minimum C350 grade and only specified SHS connections apply.

Rationalised Gust Wind Speed

Once the Region, Terrain Category, Shielding Classification and Topographic Classification have been identified, a Wind Zone can be chosen for the proposed building site. This is achieved by using table 1.

The appropriate verandah, patio or carport design can now be selected from span tables.

*This is an approximate method for estimating wind zones based on an annual probability of exceedance of 1/500 and a maximum height of 5 metres. For full analysis refer to Australian Standards AS/NZS1170.2:2011.

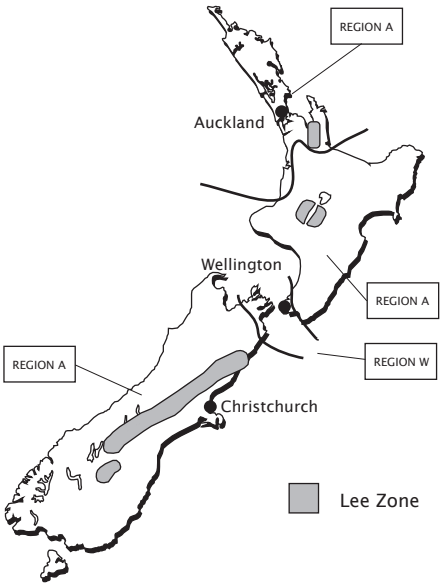
Table 1
Region A & W:

Region	Terrain Category	New Zealand Wind Zones								
		Topographic Classification								
		T1			T2			T3		
		Shielding Factor								
		FS	PS	NS	FS	PS	NS	FS	PS	NS
A	3	L	M	H	M	H	H	H	H	VH
	2.5	L	M	H	M	H	VH	H	VH	EH
	2	M	M	H	H	H	VH	H	VH	EH
	1	H	H	VH	H	VH	EH	VH	EH	N/A
W	3	M	H	H	H	H	VH	H	VH	EH
	2.5	M	H	VH	H	VH	EH	VH	EH	N/A
	2	H	H	VH	H	VH	EH	VH	EH	N/A
	1	H	VH	EH	VH	EH	N/A	EH	N/A	N/A

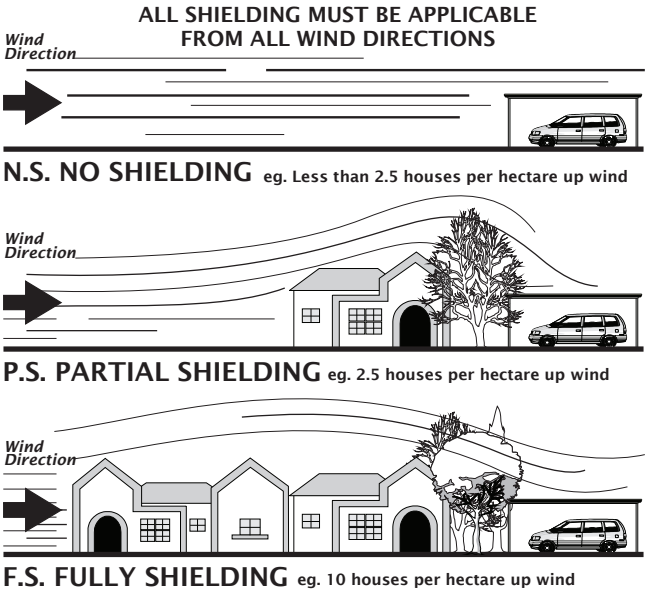
Note: The above table is not applicable for sites within a Lee Zone.
Zones:

L=Low, M=Medium, H=High, VH=Very High & EH=Extra High

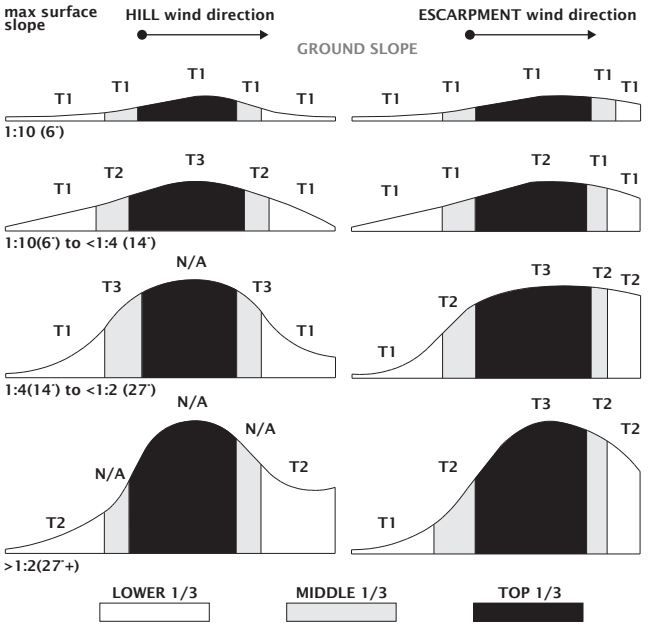
Region



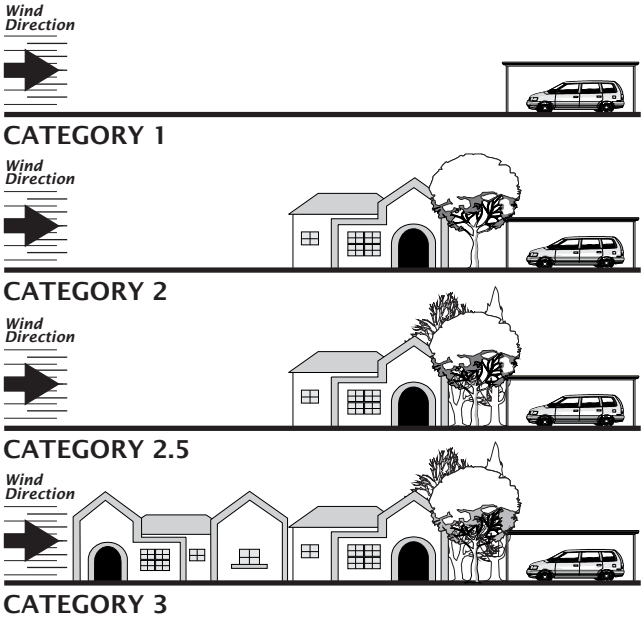
Shielding Factor Immediate Modifying Influence



Topographic Effect Ground Slope Influence



Terrain Category Overall Surrounding Environment



Explanation of Terms used in "Wind Factor Checklist"

Terrain Categories

The terrain over which wind approaching a structure passes influences the wind speed at the structure.
The terrain category classifications can be described as follows:

Category 1 Exposed open terrain with few or no obstructions. This condition is rare and exists only for isolated buildings in flat treeless, poorly grassed plains of at least 10 kilometre width.

Category 2 Open terrain, grassland with few well scattered obstructions having heights generally from 1.5 metres to 10.0 metres.

Category 2.5 Terrain with few trees and isolated obstructions. This classification is intermediate between Category 2 and Category 3.

Category 3 Terrain with numerous closely spaced obstructions having the size of domestic houses (3.0 metre to 8.0 metre high).

Shielding Classification

Shielding classification is required because the wind speed at a structure is influenced by upwind obstructions of similar size to the structure near to the building.

The three shielding classifications are defined as follows:

"FS" represents "Full Shielding". This is where at least two rows of houses or similar sized permanent obstructions surround the building being considered. In regions A and B, heavily vegetated areas can provide Full Shielding. The application of Full Shielding is considered appropriate for typical suburban development, equal to or greater than 10 houses and/or similar sized obstructions per hectare.

"PS" represents "Partial Shielding". This shall apply to intermediate situations where there are at least 2.5 houses, trees, or sheds per hectare upwind of the structure - for example, typical "acreage" type suburban development or wooded parklands.

"NS" represents "No Shielding". This is where there are no (or less than 2.5 obstructions per hectare) permanent obstructions upwind. For example, the first two rows of houses or single houses abutting open water, airfields and open parklands.

Topographic Effect

The Equivalent Maximum Surface Slope is the slope of the steepest 20 metre segment of ground directly downhill from the proposed building site on the hill, ridge or escarpment being considered. The Equivalent Maximum Surface Slope will often not occur at the actual proposed building site.

In steeply folded topography, the Equivalent Maximum Surface Slope shall be the direction giving the highest topographical classification.

Topographic classification T1 shall apply to all hills, ridges and escarpments if:

(i) for the various terrain categories the height of hills are less than as listed below.

T.C. 3	< 25 metres
T.C. 2.5	< 20 metres
T.C. 2	< 15 metres
T.C. 1	< 10 metres

(ii) the surface inclination is less than 1 in 10.

Note

This method of calculating Wind Zones has been developed with the assistance of suitably qualified engineers in order to comply with the requirements of AS/NZS 1170.2:2011, to suit carport and patio application.

However, Stratco does not accept liability for any loss or damage suffered as a result of any errors in the interpretation or application of the principles upon which this method is based. Any person wishing to check any calculations made by them pursuant to this method may wish to seek independent engineering advice.

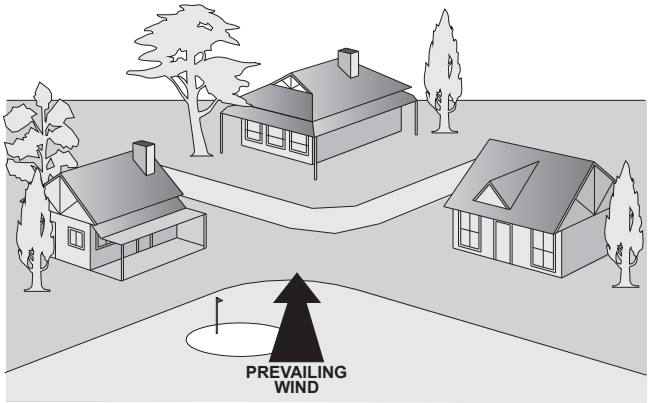
The examples below show typical applications of the New Zealand Wind Zones.
For full analysis refer to AS/NZS 1170.2 : 2011.

Region A Low, Region W Medium

Flat Suburbia

Region A Medium, Region W High - Very High

Structures built adjacent to an oval or large vacant lot subject to prevailing winds.



Region A Medium, Region W High - Very High

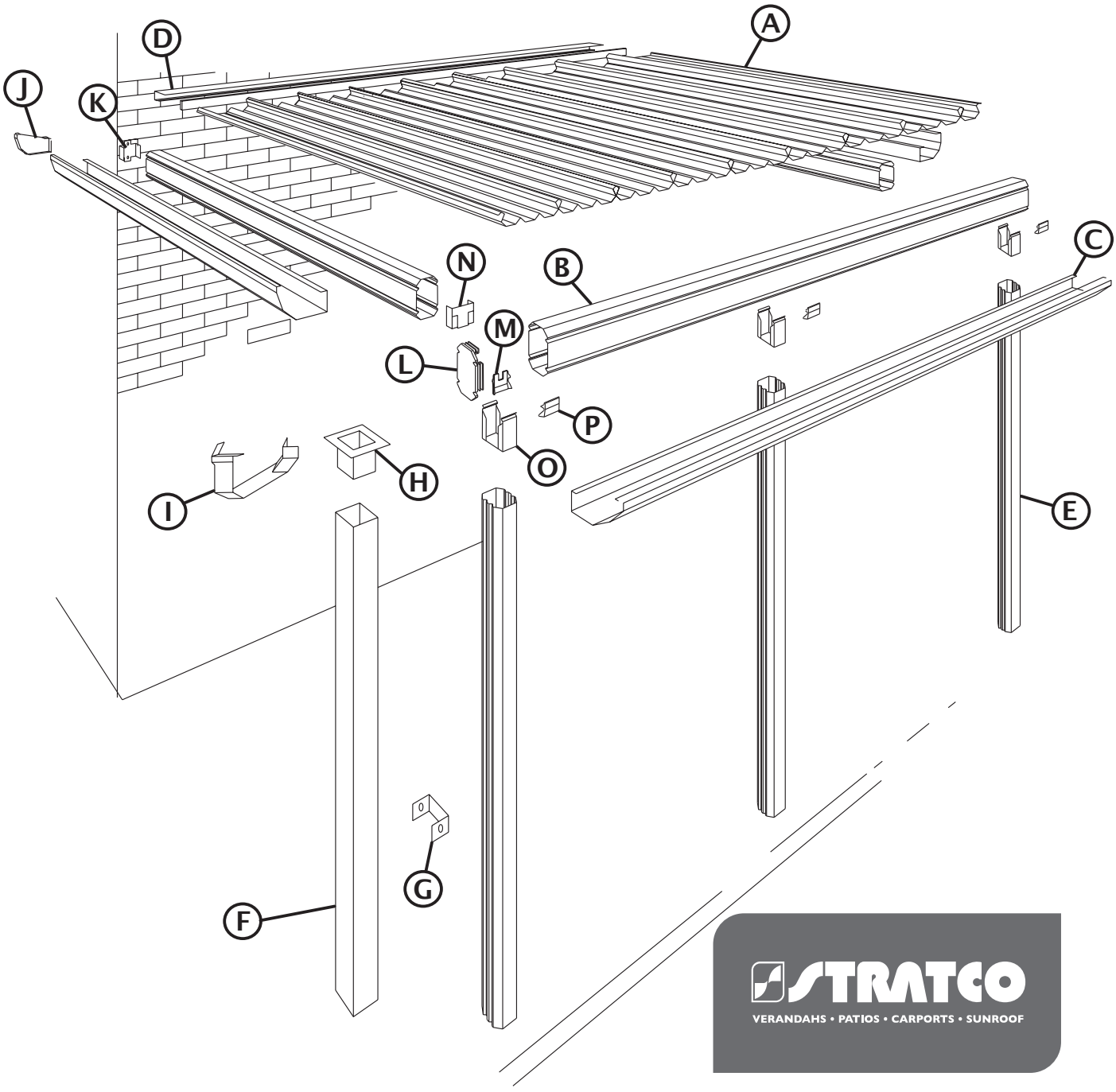
Structures on undulating terrain in suburbia

Region A Very High, N/A for other areas

Structure sited in undulating terrain sparsely populated

SPAN TABLES FOR ATTACHED FLAT PATIOS & CARPORTS

Wind Classifications: Low, Medium, High & Very High
Regions: A & W



STRATCO
VERANDAHS • PATIOS • CARPORTS • SUNROOF

- A Roofing
- B Beams
- C Gutter
- D Back Channel & B.I.P.
- E Columns
- F Downpipe
- G Downpipe Strap
- H Downpipe Outlet
- I Gutter Mitre
- J Gutter Stop End
- K Wall Bracket
- L Beam End Cap
- M Beam Filler
- N Beam Bracket
- O Post Bracket
- P Post Cap

Attached

STRATCO FLAT PATIOS & CARPORTS

Type 1A (Attached) 120 & 150 Beams

Maximum Allowable Span (mm)					
BEAM SIZE	SPAN S	L	M	H	VH
		COLUMN SPACING			
120 Beam	1500	7800	6950	6500	5900
	1800	7600	6900	6450	5850
	2100	7450	6800	6400	5700
	2400	7300	6750	6300	5500
	2700	7150	6500	6250	5300
	3000	7000	6300	6200	5150
	3300	6900	6100	6050	5000
	3600	6800	5950	5900	4850
	3900	6700	5750	5700	4700
	4200	6600	5600	5550	4550
	4500	6500	5450	5400	4450
	BO MAX:	1500	1500	1500	1300
	FOOTING TYPE:	2	3	3	3
150 Beam	1500	8950	8950	8400	7500
	1800	8800	8800	8300	7350
	2100	8600	8600	8200	7200
	2400	8450	8450	8100	7000
	2700	8300	8300	8000	6750
	3000	8200	8200	7850	6500
	3300	8050	7950	7750	6350
	3600	7950	7700	7650	6150
	3900	7850	7500	7500	5950
	4200	7750	7300	7200	5800
	4500	7650	7100	6900	5650
	BO MAX:	1500	1500	1500	1500
	FOOTING TYPE:	3	3	4	4

Notes & Requirements

1. These tables must be read in conjunction with General Notes and detail drawings on pages 1.6 - 1.13.
2. Span S is the distance between the back face of the back channel and the outside face of the fascia beam. Column spacing C is the distance between column centres. Beam overhang BO is the distance between the column centre and the outside face of the side beam.
3. The back span shall be a minimum 1.5 x BO for units with a beam overhang.
4. Columns are to be 68mm x 68mm Stratco profiled columns.
5. Columns on attached units may be fixed to existing concrete slab using the footing plate detail shown on page 1.7.
6. Additional columns may be required when a unit is attached in a corner or alcove, refer Corner or Alcove Attachment notes.
7. Interpolation may be used for values required between those shown in the tables.

Footings

1. 300 x 300 x 600mm deep with 60mm corbel.
2. 350 x 350 x 650mm deep with 60mm corbel.
3. 450 x 450 x 750mm deep with 75mm corbel.
4. 550 x 550 x 750mm deep with 75mm corbel.

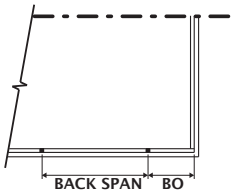
Corner or Alcove Attachment

1. For units which are attached on two or three sides to an existing structure, in wind classification L, M, H or VH the above tables may be applied with a reduction of 40%.
2. In wind classificatoin VH, Span S shall not exceed 3000mm for alcove attached and 3900mm for corner attachment.
3. Footing size shall be minimum 450 x 450 x 750mm deep with 75mm corbel.

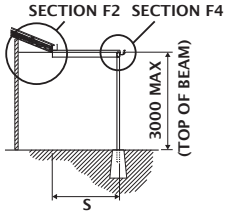
Height Increase

Units to be located in areas of wind classification L, M, H or VH, with columns embedded into concrete footings will be suitable at heights over 3000mm up to a maximum 3600mm with the following requirements:

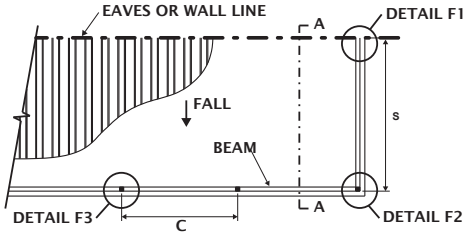
1. If an SHS column is not already being used and a Stratco profiled column has been specified it shall be reinforced with 50x50x3.0mm SHS.
2. In wind classification H & VH a 15% reduction is required in column spacing.
3. Increase allocated footing type by 1.



OPTIONAL BEAM OVERHANG



SECTION A-A



PLAN VIEW

STRATCO FLAT PATIOS & CARPORTS

Type 2A (Attached) 120 & 150 Beams

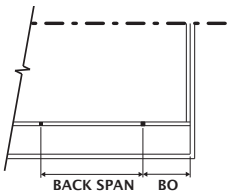
Maximum Allowable Span (mm)					
BEAM SIZE	SPAN S	L	M	H	VH
		COLUMN SPACING			
120 Beam	1500	6850	6050	5200	4800
	1800	6800	6050	5200	4800
	2100	6700	6050	5150	4800
	2400	6600	6000	5100	4750
	2700	6500	5950	5050	4750
	3000	6450	5950	5000	4700
	3300	6350	5900	4900	4700
	3600	6300	5850	4850	4650
	3900	6200	5750	4750	4600
	4200	6150	5650	4700	4500
	4500	6100	5550	4600	4450
	BO MAX:	1500	1500	1400	1200
	FOOTING TYPE:	2	3	3	3
150 Beam	1500	8050	7550	6650	5150
	1800	7950	7550	6650	5150
	2100	7850	7550	6600	5100
	2400	7750	7500	6550	5050
	2700	7650	7450	6450	5000
	3000	7550	7400	6350	4950
	3300	7500	7350	6300	4850
	3600	7400	7300	6200	4800
	3900	7350	7250	6100	4700
	4200	7250	7200	6000	4600
	4500	7200	7100	5900	4550
	BO MAX:	1500	1500	1500	1500
	FOOTING TYPE:	3	3	3	4

Notes & Requirements

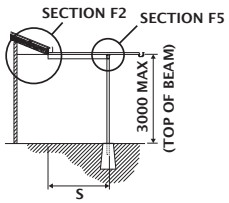
1. These tables must be read in conjunction with General Notes and detail drawings on pages 1.6 - 1.13.
2. Span S is the distance between the back face of the back channel and the outside face of the fascia beam. Column spacing C is the distance between column centres. Beam overhang BO is the distance between the column centre and the outside face of side beam. Deck overhang DO is the distance between the outside face of the fascia beam and the inside edge of the gutter.
3. The back span shall be a minimum 1.5 x BO for units with a beam overhang.
4. Spans shown allow for a maximum deck overhang DO of 900mm. Span S must be at least 1.5 times deck overhang DO.
5. Columns are to be 68mm x 68mm Stratco profiled columns.
6. Columns on attached units may be fixed to existing concrete slab using the footing plate detail shown on page 1.7.
7. Additional columns may be required when a unit is attached in a corner or alcove, refer Corner or Alcove Attachment notes.
8. Interpolation may be used for values required between those shown in the tables.

Footings

1. 300 x 300 x 600mm deep with 60mm corbel.
2. 350 x 350 x 650mm deep with 60mm corbel.
3. 450 x 450 x 750mm deep with 75mm corbel.
4. 550 x 550 x 750mm deep with 75mm corbel.



OPTIONAL BEAM OVERHANG



SECTION A-A

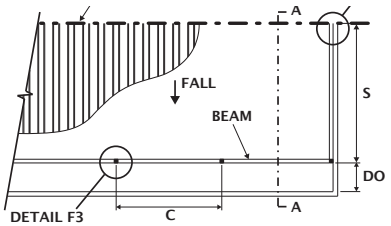
Corner or Alcove Attachment

1. For units which are attached on two or three sides to an existing structure, in wind classification L, M, H or VH, the above tables may be applied with a reduction of 50% for 120 beam, 50% for 150 beam up to and including 3000mm span and 60% for 150 beam exceeding 3000mm span.
2. In wind classificatoin VH, Span S shall not exceed 3000mm for alcove attached and 3900mm for corner attachment.
3. Footing size shall be minimum 450 x 450 x 750mm deep with 75mm corbel.

Height Increase

Units to be located in areas of wind classification L, M, H or VH, with columns embedded into concrete footings will be suitable at heights over 3000mm up to a maximum 3600mm with the following requirements:

1. If an SHS column is not already being used and a Stratco profiled column has been specified it shall be reinforced with 50x50x3.0mm SHS.
2. In wind classification M, H & VH a 15% reduction is required in column spacing.
3. Increase allocated footing type by 1 or increase footing depth by 100mm if type 4 is allocated.



PLAN VIEW

STRATCO FLAT PATIOS & CARPORTS

Type 3A (Attached) 120 & 150 Beams

Maximum Allowable Span (mm)									
BEAM SIZE	SPAN S	L		M		H		VH	
		BEAM SPACING B	COLUMN SPACING C	BEAM SPACING B	COLUMN SPACING C	BEAM SPACING B	COLUMN SPACING C	BEAM SPACING B	COLUMN SPACING C
120 Beam	3000	4500	6500	4500	6300	4000	5800	3050	5150
	3600	4500	6250	4500	5850	3750	5600	2900	4900
	4200	4500	6050	4300	5550	3550	5450	2700	4650
	4800	4500	5850	4100	5250	3400	5350	2600	4400
	5400	4500	5700	3500	5100	2900	5350	2200	4250
	6000	3450	5700	3000	4900	2500	5350	1900	4050
	6600	2150	5600	2150	4850	2050	5100	1550	3850
	7200	1300	5300	1300	4650	1300	4900	1250	3750
BO MAX:		500		500		500		500	
FOOTING TYPE:		2		3		3		3	
150 Beam	3000	4500	7650	4500	7650	4000	6950	3050	6700
	3600	4500	7400	4500	7400	3800	6550	2900	6400
	4200	4500	7200	4300	7200	3600	6200	2750	6050
	4800	4500	7050	4100	7050	3400	6000	2600	5700
	5400	4500	6850	3900	6750	3250	5600	2450	5450
	6000	4500	6700	3700	6450	3100	5350	2350	5200
	6600	4050	6700	3550	6150	2950	5100	2250	4950
	7200	3200	6600	3200	5950	2850	4900	2150	4750
	7800	2050	6550	2050	5750	2050	4750	2000	4550
	8400	1250	5600	1250	5600	1250	4600	1250	4350
BO MAX:		500		500		500		500	
FOOTING TYPE:		3		3		3		4	

Notes & Requirements

1. These tables must be read in conjunction with General Notes and detail drawings on pages 1.6 - 1.13.
2. Span S is the distance between the wall or eaves line and the outside face of the fascia beam. Beam Spacing B is the distance between beam centres. Column spacing C is the distance between column centres. Beam overhang BO is the distance between the column centre and the outside face of the side beam. Deck overhang DO is the distance between the outside face of the fascia beam and the inside edge of the gutter.
3. The back span shall be a minimum 1.5 x BO for units with a beam overhang.
4. Spans shown allow for a maximum 600mm deck overhang DO which may be added to the beam overhang BO to give total overhang.
5. In addition to the maximum column spacing allocated, all columns must be located within 500mm of a beam location.
6. Columns on attached units may be fixed to existing concrete slab using the footing plate detail shown on page 1.7.
7. Columns are to be 68mm x 68mm Stratco profiled columns.
8. Type 3A designs suit one side attached only and additional beams and/or columns may be required when a unit is attached in a corner or alcove, refer to Stratco for further advice.
9. Interpolation may be used for values required between those shown in the tables.

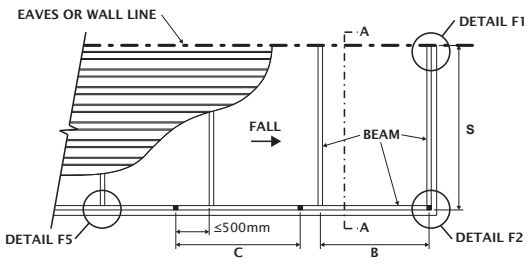
Footings

1. 300 x 300 x 600mm deep with 60mm corbel.
2. 350 x 350 x 650mm deep with 60mm corbel.
3. 450 x 450 x 750mm deep with 75mm corbel.
4. 550 x 550 x 750mm deep with 75mm corbel.

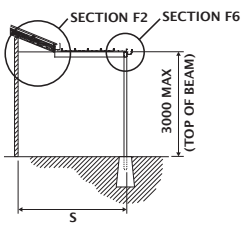
Height Increase

Units to be located in areas of wind classification L, M, H or VH, with columns embedded into concrete footings will be suitable at heights over 3000mm up to a maximum 3600mm with the following requirements:

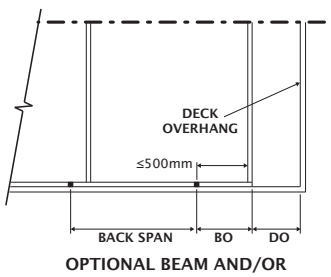
1. If an SHS column is not already being used and a Stratco profiled column has been specified it shall be reinforced with 50x50x3.0mm SHS.
2. In wind classification M, H & VH a 15% reduction is required in both beam and column spacing.
3. Increase allocated footing type by 1.



PLAN VIEW



SECTION A-A



OPTIONAL BEAM AND/OR DECK OVERHANG

STRATCO FLAT PATIOS & CARPORTS

Type 4A (Attached) 120 & 150 Beams

Maximum Allowable Span (mm)									
BEAM SIZE	SPAN S	L		M		H		VH	
		BEAM SPACING B	COLUMN SPACING C	BEAM SPACING B	COLUMN SPACING C	BEAM SPACING B	COLUMN SPACING C	BEAM SPACING B	COLUMN SPACING C
120 Beam	3600	6800	7000	6750	4850	5750	4050	4350	3900
	3900	6700	6850	6150	4750	5100	3950	3900	3850
	4200	6600	6750	5550	4650	4600	3850	3450	3800
	4500	6350	6650	5000	4550	4550	3800	3150	3750
	4800	5450	6550	4550	4500	4500	3700	2850	3700
	5100	4600	6300	4150	4450	4450	3700	2600	3650
	5400	3850	5850	3800	4400	4400	3650	2350	3600
	5700	3250	5550	3250	4350	4350	3550	2200	3500
	6000	2750	5500	2750	4300	4300	3500	2000	3500
BO MAX:		500		500		500		500	
FOOTING TYPE:		2		2		3		3	
150 Beam	3600	7950	7100	7950	6300	7450	5300	6500	5000
	4200	7750	6850	7750	6050	7150	5050	5450	4800
	4800	7550	6600	7100	5850	5850	4800	4450	4650
	5400	6800	6350	5950	5600	4900	4650	3700	4500
	6000	5500	6200	5050	5450	4200	4500	3150	4400
	6600	4550	6050	4400	5300	3600	4400	2750	4250
	7200	3750	5900	3750	5200	3150	4250	2400	4150
	7800	3000	5600	3000	5050	2800	4150	2100	4000
	8400	2350	5400	2350	4950	2350	4050	1850	3900
BO MAX:		500		500		500		500	
FOOTING TYPE:		2		3		3		4	

Notes & Requirements

1. These tables must be read in conjunction with General Notes and detail drawings on pages 1.6 - 1.13.
2. Span S is the distance between the wall or eaves line and the outside face of the fascia beam. Beam Spacing B is the distance between beam centres. Column spacing C is the distance between column centres. Beam overhang BO is the distance between the column centre and the outside face of the side beam. Deck overhang DO is the distance between the outside face of the fascia beam and the inside edge of the gutter.
3. The back span shall be a minimum 1.5 x BO for units with a beam overhang.
4. Spans shown allow for a maximum 600mm deck overhang DO.
5. In addition to the maximum column spacing allocated, all columns must be located within 500mm of a beam location.
6. The purlins must be positioned mid - span of distance S.
7. Columns are to be 68mm x 68mm Stratco profiled columns.
8. Columns on attached units may be fixed to existing concrete slab using the footing plate detail shown on page 1.7.
9. Type 4A designs suit one side attached only and additional beams and/or columns may be required when a unit is attached in a corner or alcove, refer to Stratco for further advice.
10. Interpolation may be used for values required between those shown in the tables.

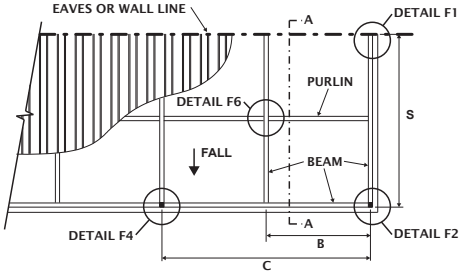
Footings

1. 300 x 300 x 600mm deep with 60mm corbel.
2. 350 x 350 x 650mm deep with 60mm corbel.
3. 450 x 450 x 750mm deep with 75mm corbel.
4. 550 x 550 x 750mm deep with 75mm corbel.

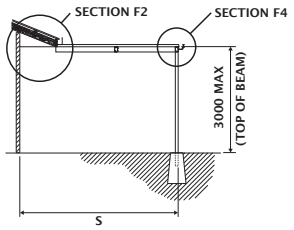
Height Increase

Units to be located in areas of wind classification L, M, H or VH, with columns embedded into concrete footings, will be suitable at heights over 3000mm up to a maximum 3600mm with the following requirements:

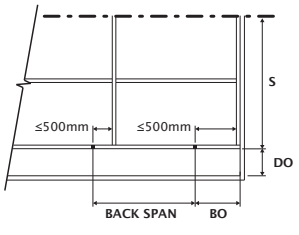
1. If an SHS column is not already being used and a Stratco profiled column has been specified it shall be reinforced with 50x50x3.0mm SHS. In N3 wind classification minimum 75x75x2.5mm SHS columns are required.
2. In wind classification M, H & VH a 15% reduction is required in both beam and column spacing.
3. Increase allocated footing type by 1.



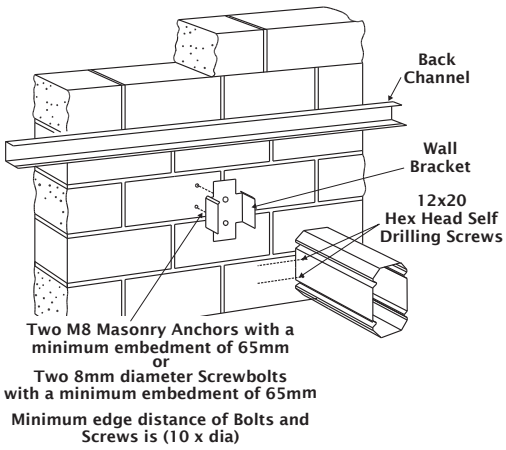
PLAN VIEW



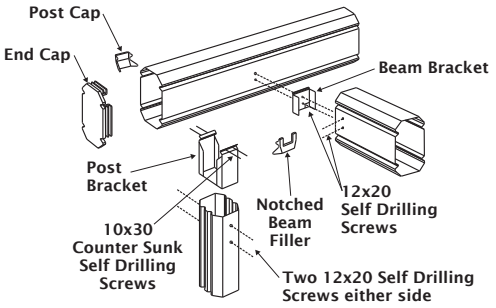
SECTION A-A



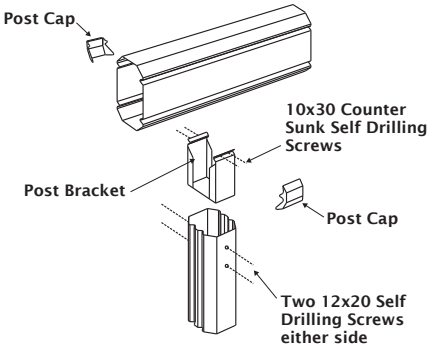
OPTIONAL BEAM AND/OR DECK OVERHANG



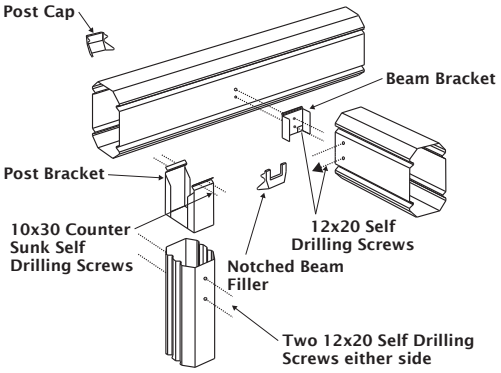
DETAIL F1



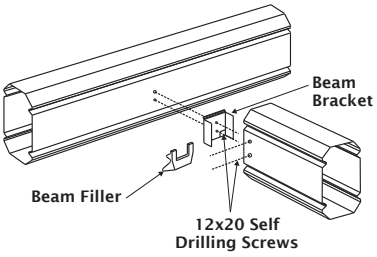
DETAIL F2



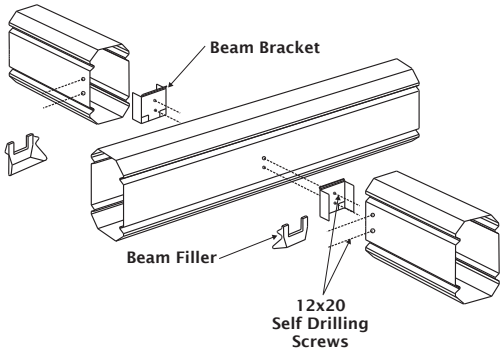
DETAIL F3



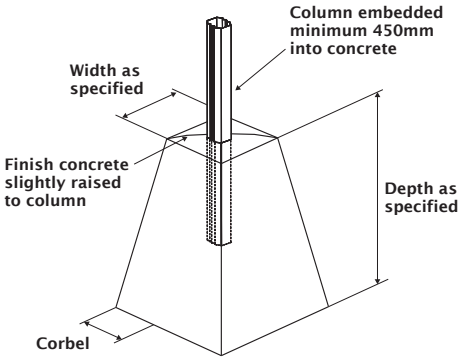
DETAIL F4



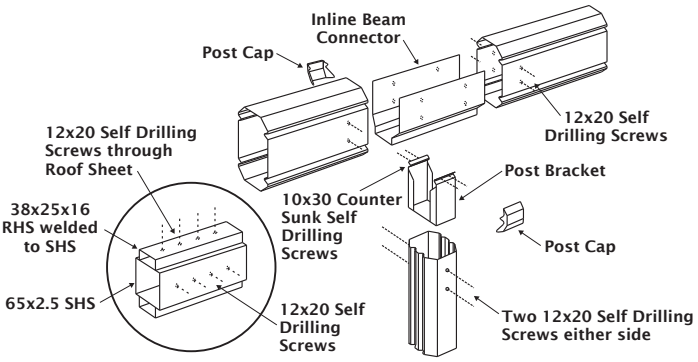
DETAIL F5



DETAIL F6

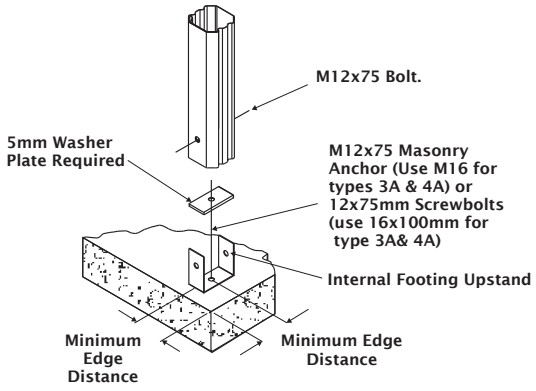


FOOTING

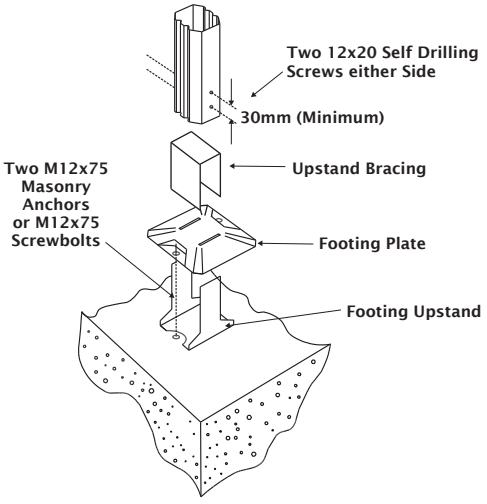


FULL MOMENT
BEAM CONNECTOR
(Mid Span Joiner)

INLINE BEAM
CONNECTOR

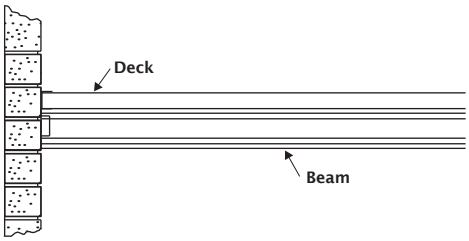


ATTACHED VERANDAH
INTERNAL FOOTING
UPSTAND

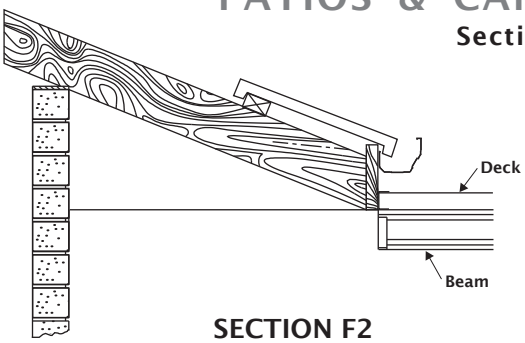


ATTACHED VERANDAH
FOOTING PLATE

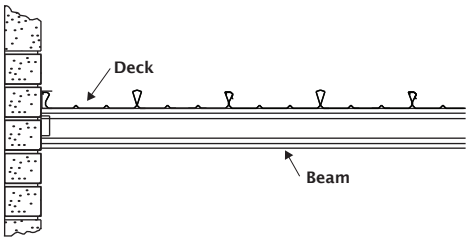
Note: The minimum edge distance is 70mm for M10 anchors, 75mm for M12 anchors and 120mm for M16 anchors.



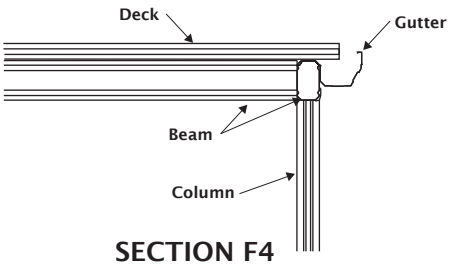
SECTION F1



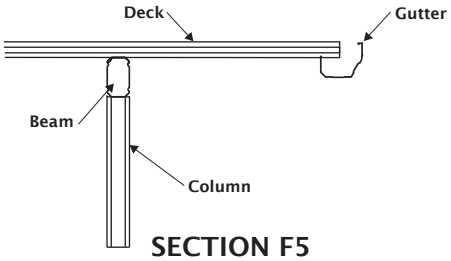
SECTION F2



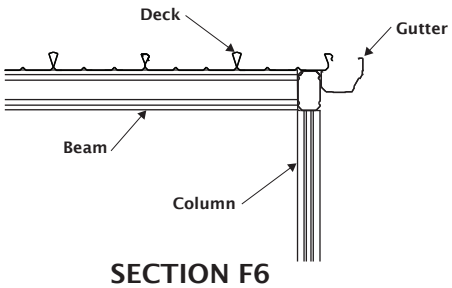
SECTION F3



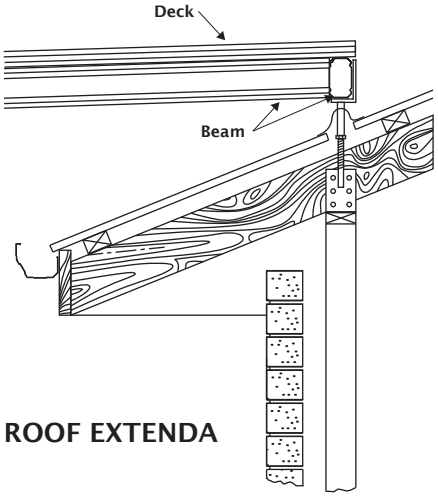
SECTION F4



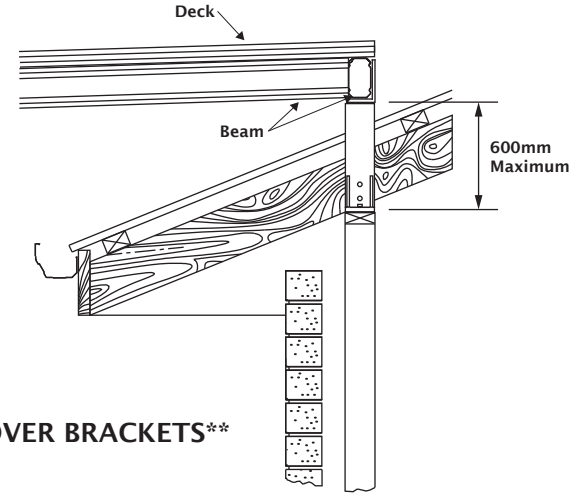
SECTION F5



SECTION F6



ROOF EXTENDA



FLYOVER BRACKETS**

**Flyover Brackets are available for Flat Patio attachments.
Refer Stratco for further advice.

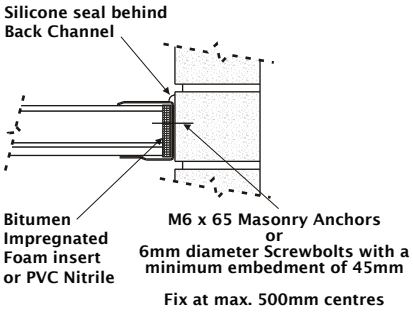
Roof Extenda® Brackets:

For additional unit height (not to exceed that specified in the relevant tables) the option of using Roof Extenda® Brackets is available. Brackets are manufactured by Roof Extenda® PTY LTD with installation instructions, spacing requirements and engineering certification to be provided by Roof Extenda: www.roofextenda.com.au.

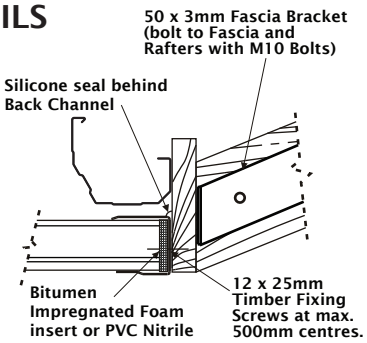
**FLYOVER Brackets:

Flyover brackets are available for Flat Patio attachments. Refer Stratco for further advice including installation requirements and engineering details.

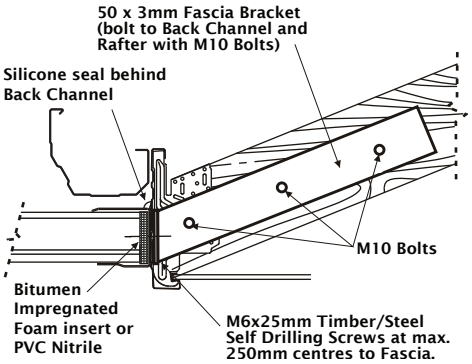
BACK CHANNEL FIXING DETAILS



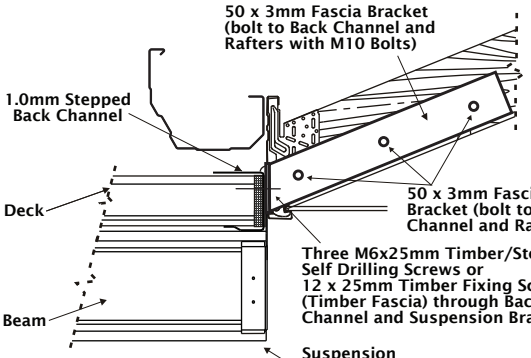
BRICKWORK



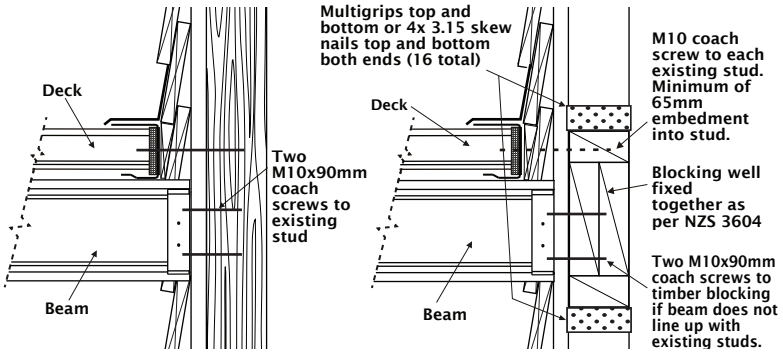
TIMBER FASCIA



STEEL FASCIA

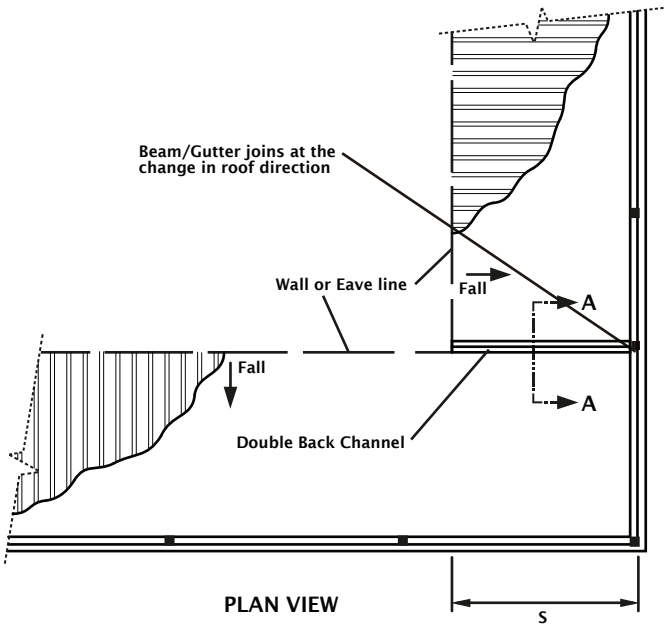


SUSPENSION BRACKET

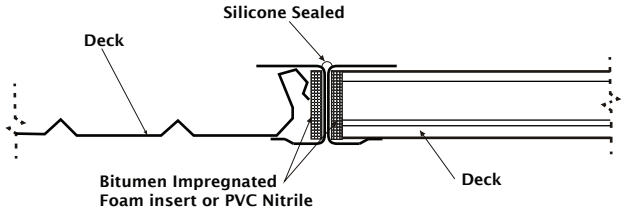


TIMBER FRAME WEATHERBOARD

Note: Existing framing as per NZS3604.



PLAN VIEW



TYPICAL SECTION A-A

DOUBLE BACK CHANNEL DETAILS

Fascia brackets are generally fastened at maximum 1200mm centres to back channel and rafters. Additional strengthening may be required, it is the builder's responsibility to determine the adequacy of the rafters and the frequency of brackets for each individual situation (refer note 10, General Notes).

CLICKFORM COVER CHANNEL

If required, rivet cover channel to the outside face and underside edge of fascia at max. 250mm centres.

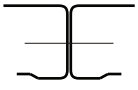
RECOMMENDED BACK CHANNEL FIXINGS

Timber Fascia: Use 12x25 timber fixing screws at max. 500mm centres.

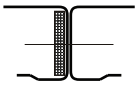
Brickwork: Use M6x65 masonry anchors
OR
6mm diameter screwbolts with a minimum embedment of 45mm.
Fix at max. 500mm centres.

Steel Fascia: Use M6x25mm Timber/Steel Self Drilling Screws at max. 250mm centres. It is recommended steel fascia brackets are fastened to the side of rafters at maximum 1200mm centres.

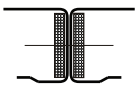
MAXIMUM ALLOWABLE SPAN (S)				
SECTION	L	M	H	VH
Double Back channel	3700	2850	2450	1950
Single Reinforced Back Channel	4200	3600	3100	2500
Double Reinforced Back Channel	4500	4500	4150	3400



DOUBLE BACK CHANNEL
Back channels fixed with 12x20 Self Drilling Screws from alternating sides at maximum 300mm centres.

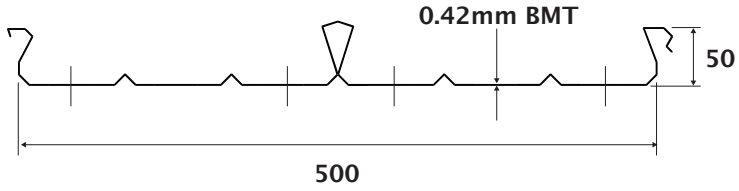


SINGLE REINFORCED BACK CHANNEL
1 strip 50x5mm galvanised mild steel flat strip fixed by 6mm diameter bolts at maximum 500mm centres.



DOUBLE REINFORCED BACK CHANNEL
2 strips 50x5mm galvanised mild steel flat strip fixed by 6mm diameter bolts at maximum 500mm centres.

ROOF SHEETING

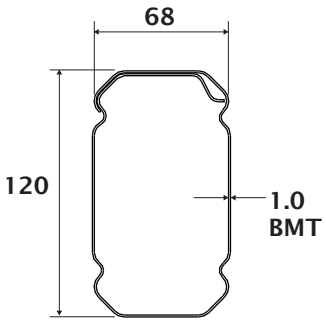


DECK

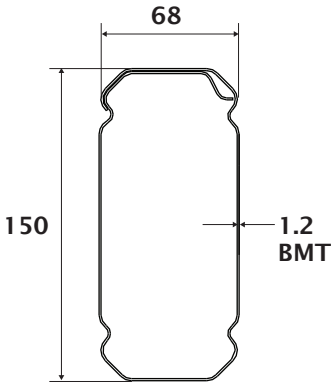
FIXING REQUIREMENTS:

Two 12 x 20 self drilling screws per pan at each support and two 3.2mm sealed aluminium rivets per pan at the Back Channel. If decking runs parallel to the back channel, secure to channel with rivets at maximum 200mm centres and screw to parallel beams at 500mm centres. All screws are to have neoprene washers.

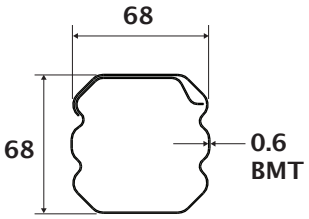
STRUCTURAL SECTIONS



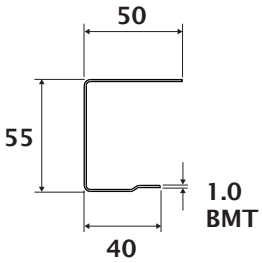
120 BEAM



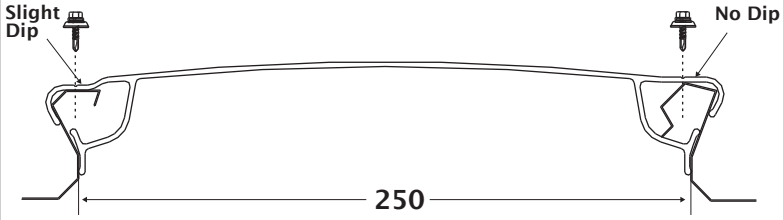
150 BEAM



68 POST/PURLIN



BACK CHANNEL



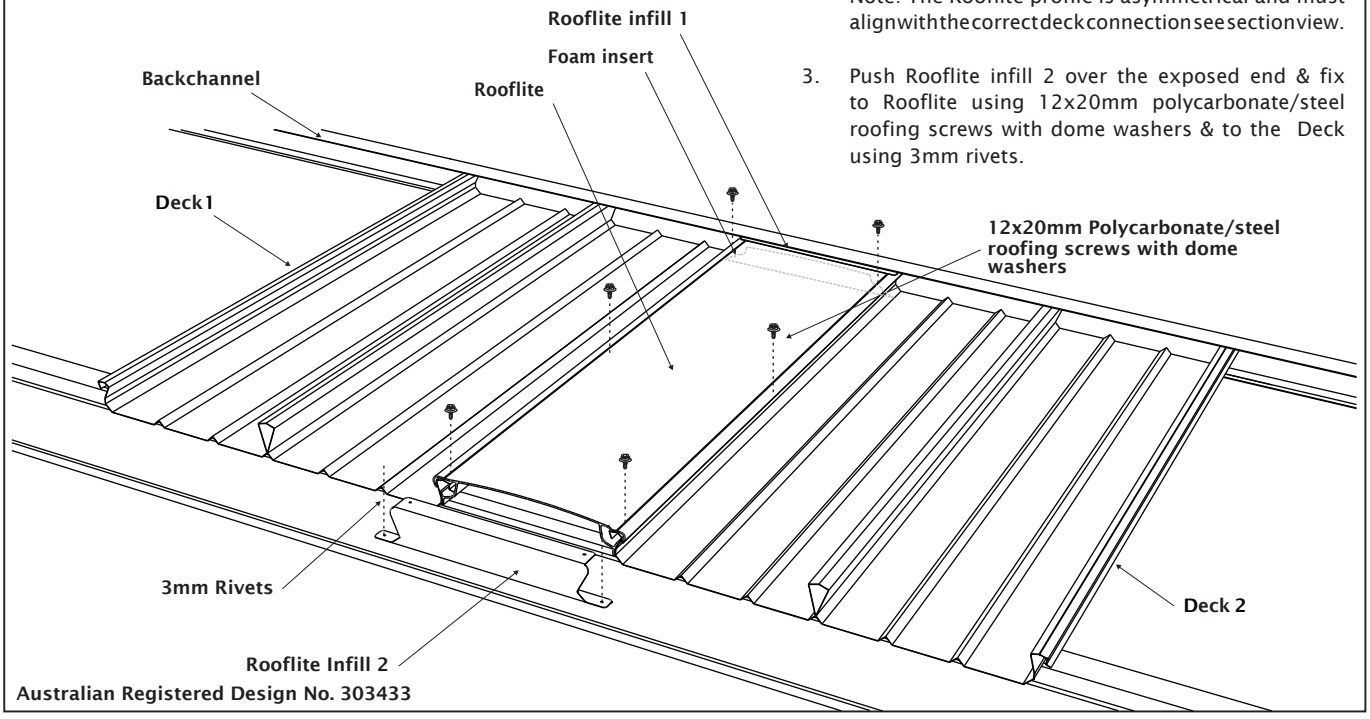
ROOFLITE™

RECOMMENDED FIXING:

1. Fix Deck (1 & 2) into backchannel & appropriate beams 250mm apart using self drilling screws & rivets. Insert Rooflite infill 1 into the backchannel covering the 250mm gap & fix with 3mm rivets.

2. Snap or slide the Rooflite onto already installed decking & fix with 12x20mm polycarbonate/steel roofing screws with dome washers at maximum 1200mm centres, beginning from the rear. Note: The Rooflite profile is asymmetrical and must align with the correct deck connection see section view.

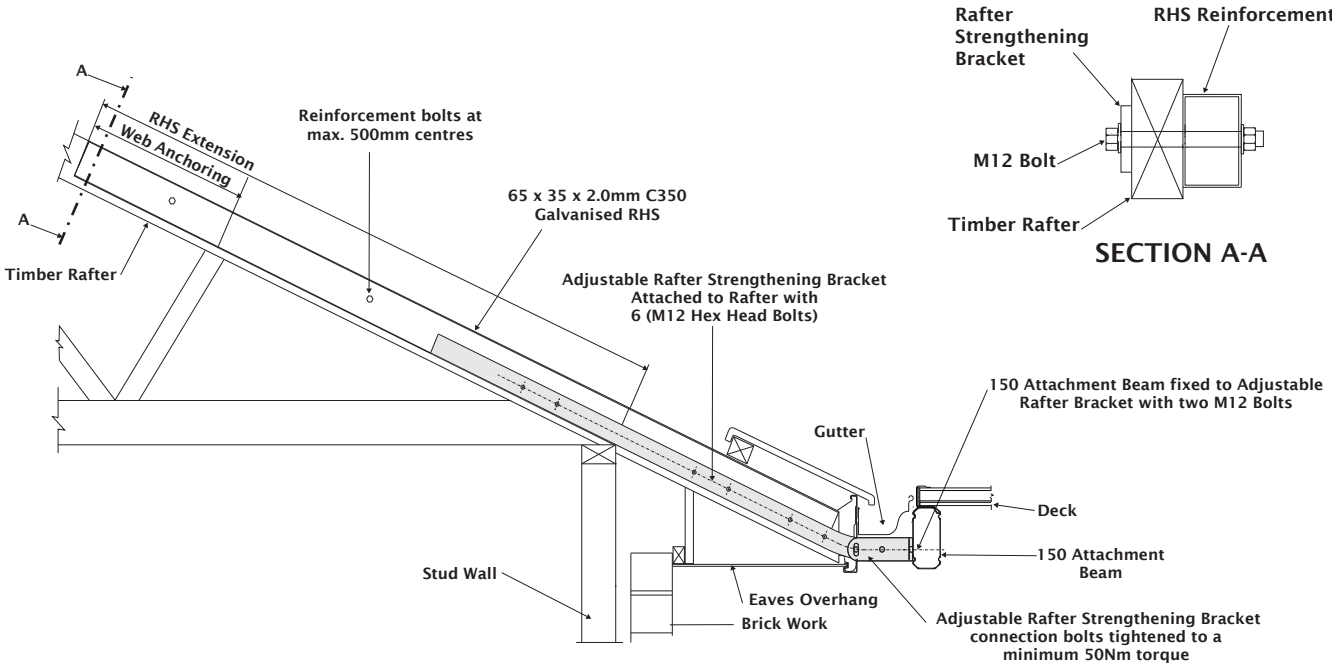
3. Push Rooflite infill 2 over the exposed end & fix to Rooflite using 12x20mm polycarbonate/steel roofing screws with dome washers & to the Deck using 3mm rivets.



Australian Registered Design No. 303433

STRATCO FLAT PATIOS & CARPORTS

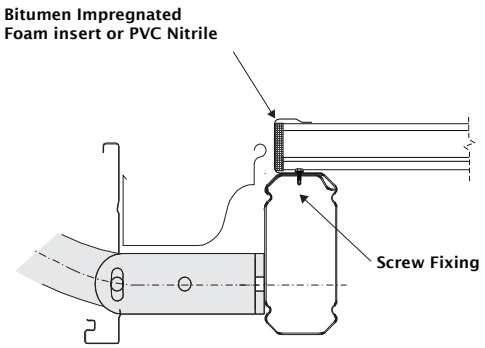
Alternate Flat Attachment Details for Timber Framed Houses

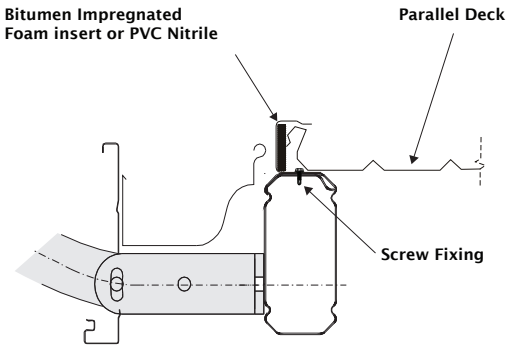


Maximum Recommended Bracket Spacing : 1200mm
Recommended RHS Extension Beyond Birds Mouth : 1900mm
Recommended Web Overhang : 400mm

Note: Additional strengthening may be required and its is the builders responsibility to ensure rafters are adequately reinforced and appropriately tied down to walls.

RHS Reinforcement may be cut to suit roof frame configuration provided framework and connections are suitable to sustain additional loads (refer General Note 10, p4).



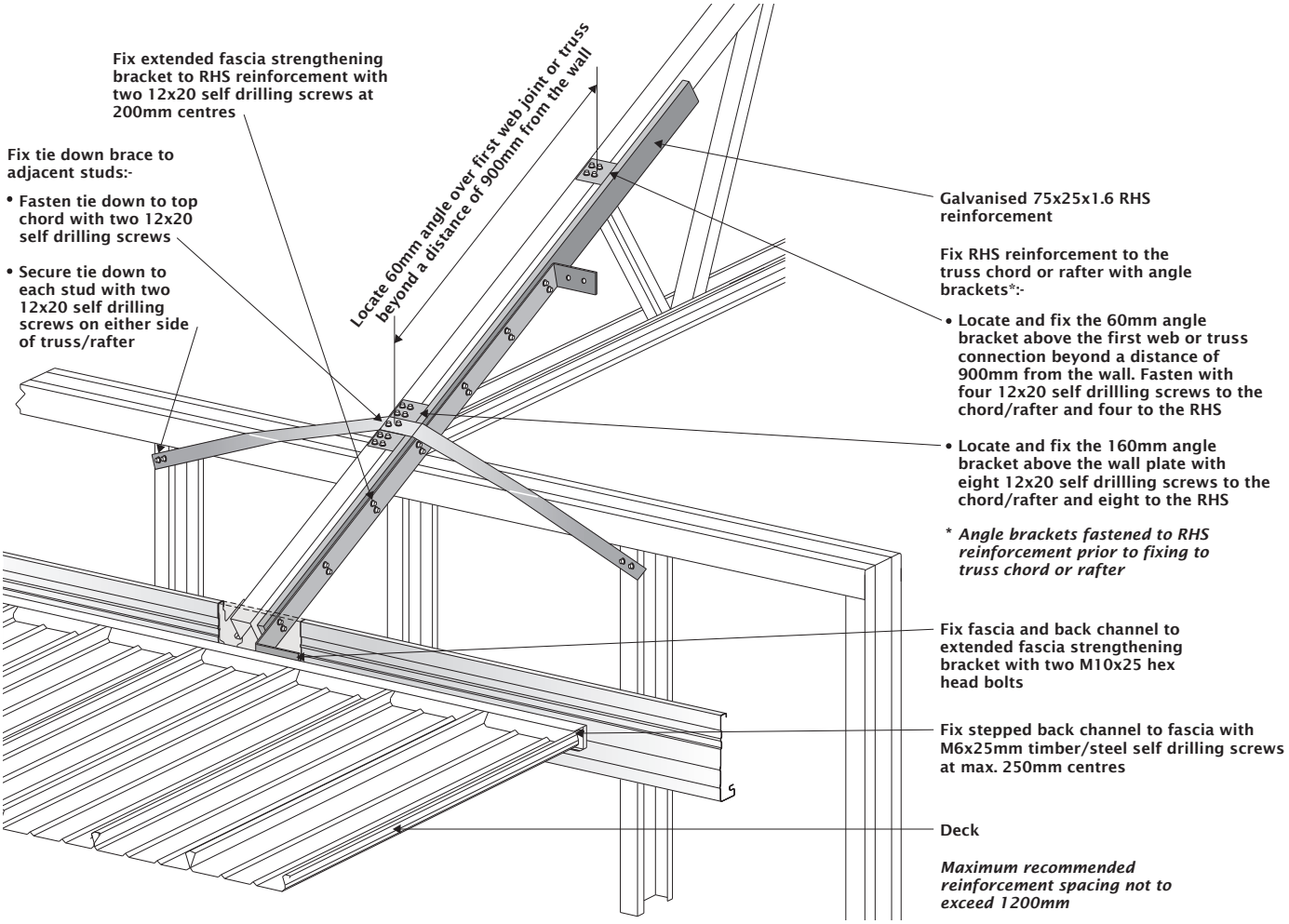


ROOF SHEETING FIXING REQUIREMENTS

Two 12x20 self drilling screws per pan through back channel and beam. If decking runs parallel to the beam, screw through back channel and beam at maximum 500mm centres. All screws are to have neoprene washers.

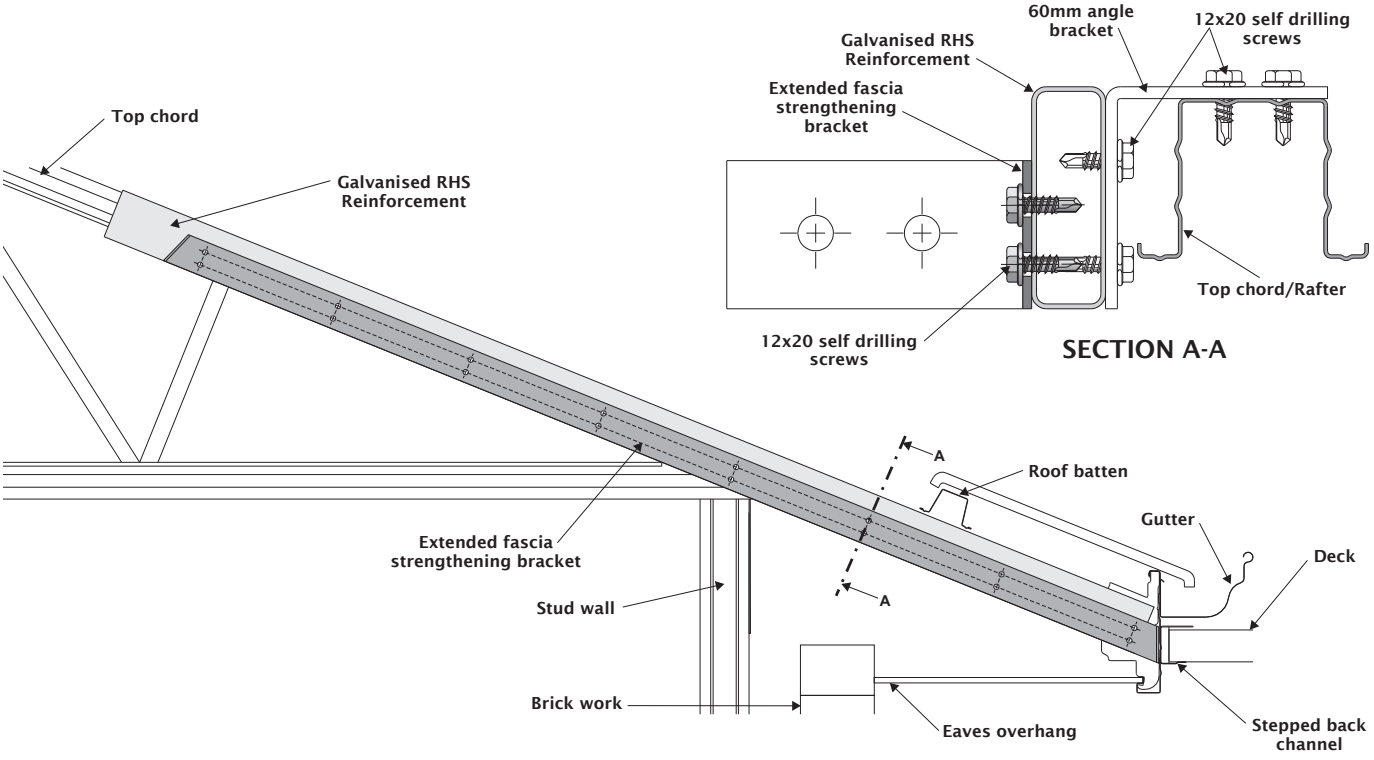
RAFTER STRENGTHENING BRACKET DESIGN LIMITATIONS

Flat patio attachment via Rafter Strengthening Brackets is suitable for Type 1A, 2A and 3A options. For Type 4A designs, on Low and Medium wind zones, standard tables apply. For type 4A designs, in High and Very High wind zones, the maximum allowable Beam Spacing shall be limited to the same spacing allocated for Type 3A designs at the equivalent span.



ROOF FRAME REINFORCEMENT FOR STEEL FRAMED HOUSES

Note: It is the builders responsibility to ensure that rafters, trusses, and wall frames are adequately reinforced, and the appropriate tie down is used.

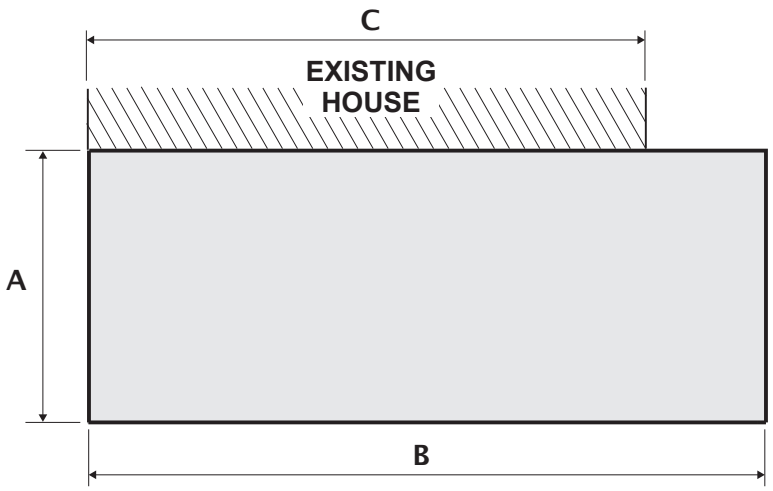


SIDE ELEVATION - ROOF FRAME REINFORCEMENT FOR STEEL FRAMED HOUSES

Demarcation of attached and freestanding units (explanation of note 14 of General Notes section).

Flat Units

A Patio or Carport is deemed to be attached if it is attached to an existing house for at least 75% of the unit length (ie longest side).



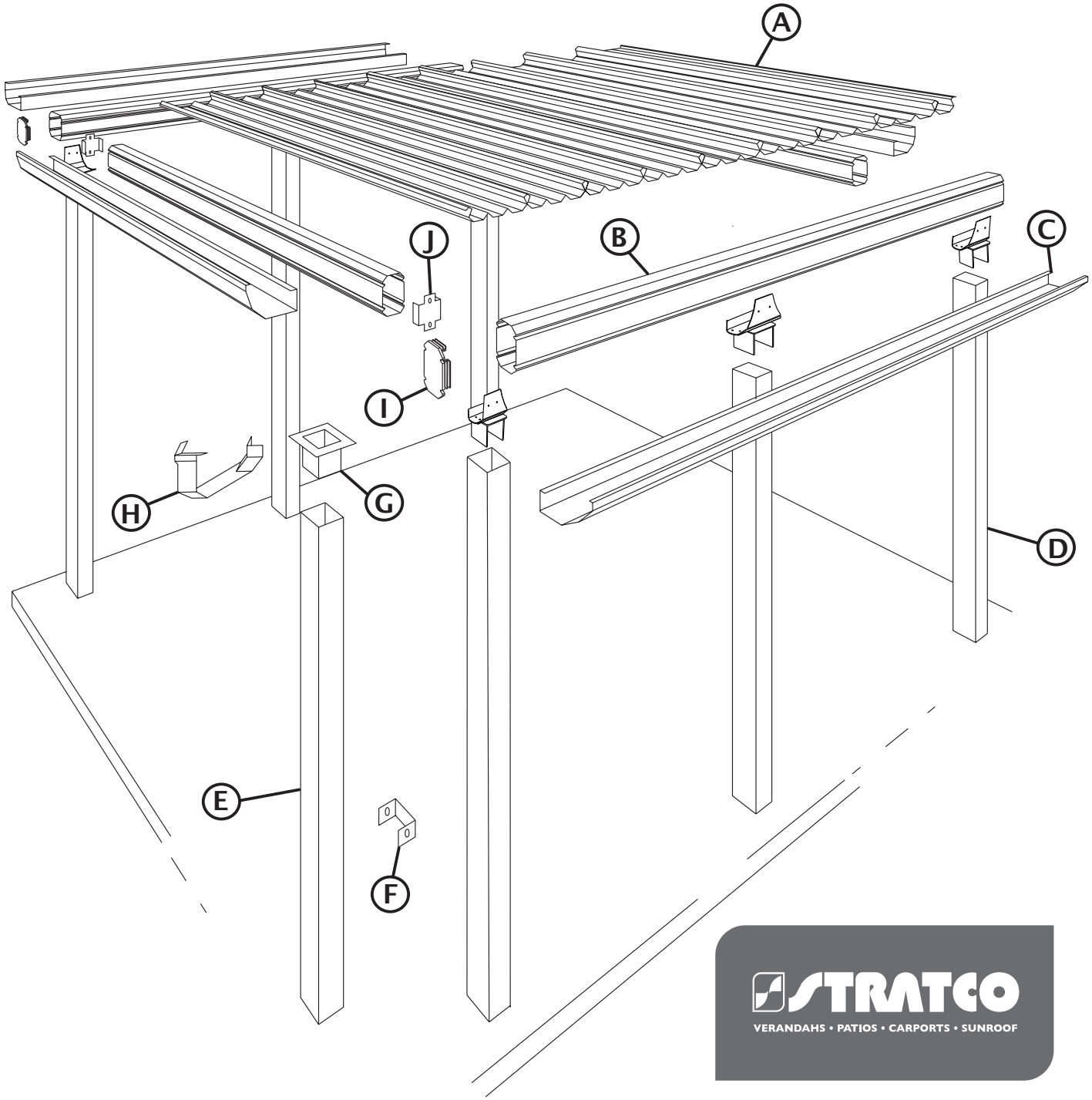
The unit is considered attached if:

- **C = 0.75 B or more**

Note: Flat units which fall outside the above requirement are considered partially attached. Column sizes are to be taken from applicable freestanding tables. Beam and column spacing as well as footing size taken as the worst case between the applicable attached and freestanding tables.

SPAN TABLES FOR FREESTANDING FLAT PATIOS & CARPORTS

Wind Classifications: Low, Medium, High & Very High
Regions: A & W



STRATCO
VERANDAHS • PATIOS • CARPORTS • SUNROOF

- A Roofing
- B Beams
- C Gutter
- D Columns
- E Downpipe
- F Downpipe Strap
- G Downpipe Outlet
- H Gutter Mitre
- I Beam End Cap
- J F.S. Column Bracket

Freestanding

STRATCO FLAT PATIOS & CARPORTS

Type 1F (Freestanding)
120 & 150 Beams

Maximum Allowable Spans (mm)												
BEAM SIZE	SPAN S	L			M			H			VH		
		Column Spacing C	Column Type	Footing Type	Column Spacing C	Column Type	Footing Type	Column Spacing C	Column Type	Footing Type	Column Spacing C	Column Type	Footing Type
120 Beam	1500	7800	1	1	7800	1	1	7800	1	1	7800	1	2
	1800	7600	1	1	7600	1	1	7600	1	1	7600	1	2
	2100	7450	1	1	7450	1	1	7450	1	2	7450	1	3
	2400	7300	1	1	7300	1	1	7300	1	2	7000	1	3
	2700	7150	1	1	7150	1	1	7150	1	2	6600	1	3
	3000	7000	1	1	7000	1	1	7000	1	2	6300	1	3
	3300	6900	1	1	6900	1	2	6750	1	2	6000	1	3
	3600	6800	1	1	6800	1	2	6450	1	2	5750	1	3
	3900	6700	1	1	6700	1	2	6200	1	2	5500	1	3
	4200	6600	1	1	6600	1	2	5750	1	2	5350	1	3
	4500	6500	1	2	6500	1	2	5350	1	2	5150	1	3
BO MAX:		1500			1500			1500			700		
150 Beam	1500	8950	1	1	8950	1	1	8950	1	1	8950	1	2
	1800	8800	1	1	8800	1	1	8800	1	2	8800	1	3
	2100	8600	1	1	8600	1	1	8600	1	2	8600	1	3
	2400	8450	1	1	8450	1	1	8450	1	3	8450	2	3
	2700	8300	1	1	8300	1	2	8300	1	3	8200	2	3
	3000	8200	1	1	8200	1	2	8200	1	3	7800	2	3
	3300	8050	1	1	8050	1	2	8050	1	3	7450	2	3
	3600	7950	1	1	7950	1	3	7950	1	3	7150	2	3
	3900	7850	1	2	7850	1	3	7700	2	3	6850	2	4
	4200	7750	1	2	7750	1	3	7450	2	3	6600	2	4
	4500	7650	1	2	7650	1	3	6950	2	3	6400	2	4
BO MAX:		1500			1500			1500			1500		

Notes & Requirements

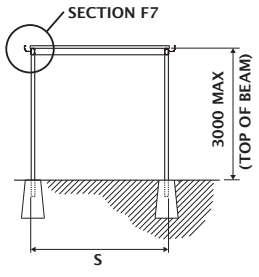
1. These tables must be read in conjunction with General Notes and detail drawings on pages 2.6 - 2.7.
2. Span S is the distance between the outside of the fascia beams. Column spacing C is the distance between column centres. Beam overhang BO is the distance between the column centres and the outside face of the side beam.
3. The back span shall be a minimum 1.5 x BO for units with a beam overhang.
4. Dimensions are in millimetres.
5. Columns on freestanding units of up to 2400mm height may be fixed to existing concrete slab using the footing plate detail shown on page 2.6.
6. Storage/Vehicles under freestanding patios or carports must not block more than 50% of the open area of any one side.
7. Interpolation may be used for values required between those shown in the tables.

Columns

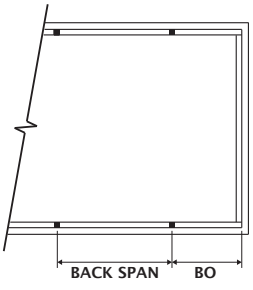
1. 65 x 65 x 2.5 SHS
2. 75 x 75 x 2.5 SHS

Footings

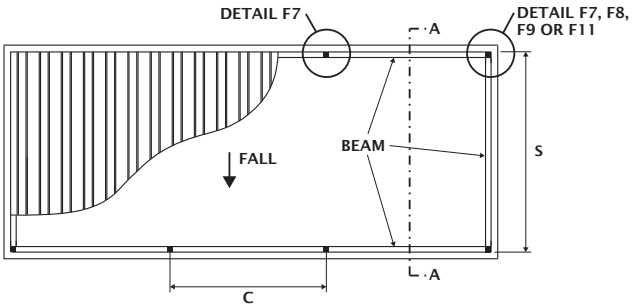
1. 300 x 300 x 600mm deep with 60mm corbel.
2. 350 x 350 x 650mm deep with 60mm corbel.
3. 450 x 450 x 750mm deep with 75mm corbel.
4. 550 x 550 x 750mm deep with 75mm corbel.



SECTION A-A



OPTIONAL BEAM OVERHANG



PLAN VIEW

STRATCO FLAT PATIOS & CARPORTS

Type 2F (Freestanding) 120 & 150 Beams

Maximum Allowable Spans (mm)													
BEAM SIZE	SPAN S	L			M			H			VH		
		Column Spacing C	Column Type	Footing Type	Column Spacing C	Column Type	Footing Type	Column Spacing C	Column Type	Footing Type	Column Spacing C	Column Type	Footing Type
120 Beam	1500	6900	1	1	6900	1	1	6750	1	1	6000	1	2
	1800	6800	1	1	6800	1	1	6450	1	2	5750	1	2
	2100	6700	1	1	6700	1	1	6200	1	2	5500	1	2
	2400	6600	1	1	6500	1	1	6000	1	2	5350	1	3
	2700	6500	1	1	6250	1	1	5800	1	2	5150	1	3
	3000	6450	1	1	6050	1	2	5600	1	2	5000	2	3
	3300	6350	1	1	5900	1	2	5450	1	3	4850	2	3
	3600	6300	1	1	5750	1	2	5300	1	3	4700	2	3
	3900	6200	1	1	5600	1	2	5150	1	3	4600	2	3
	4200	6150	1	2	5450	1	2	5050	1	3	4450	2	3
	4500	6100	1	2	5300	1	2	4900	1	3	4350	2	3
BO MAX:		1500			1300			1300			700		
150 Beam	1500	8050	1	1	8050	1	1	8050	1	2	7450	2	3
	1800	7950	1	1	7950	1	1	7950	1	2	7150	2	3
	2100	7850	1	1	7850	1	2	7700	2	3	6850	2	3
	2400	7750	1	1	7750	1	2	7450	2	3	6600	2	3
	2700	7650	1	1	7650	1	2	6950	2	3	6400	2	3
	3000	7550	1	1	7550	1	2	6500	2	3	6200	2	3
	3300	7500	1	2	7300	1	2	6750	2	3	5850	2	3
	3600	7400	1	2	7100	2	3	6600	2	3	5500	2	3
	3900	7350	1	2	6950	2	3	6400	2	3	5200	2	3
	4200	7250	1	2	6750	2	3	6250	2	3	4950	2	3
	4500	7200	1	2	6600	2	3	6100	2	3	4700	2	3
BO MAX:		1500			1300			1300			1300		

Notes & Requirements

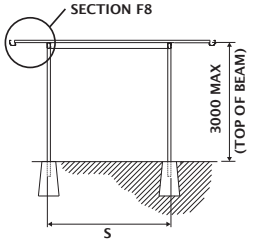
1. These tables must be read in conjunction with General Notes and detail drawings on pages 2.6 - 2.7.
2. Span S is the distance between the outside of the fascia beams. Column spacing C is the distance between column centres. Beam overhang BO is the distance between the column centre and the outside face of side beam. Deck overhang DO is the distance between the outside face of the fascia beam and the inside edge of the gutter.
3. The back span shall be a minimum 1.5 x BO for units with a beam overhang.
4. Spans allow for a maximum deck overhang DO of 900mm. Span S must be at least 1.5 times deck overhang DO.
5. Columns on freestanding units of up to 2400mm height may be fixed to existing concrete slab using the footing plate detail shown on page 2.6.
6. Storage/Vehicles under freestanding patios or carports must not block more than 50% of the open area of any one side.
7. Interpolation may be used for values required between those shown in the tables.

Columns

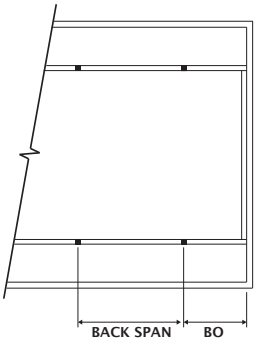
1. 65 x 65 x 2.5 SHS
2. 75 x 75 x 2.5 SHS

Footings

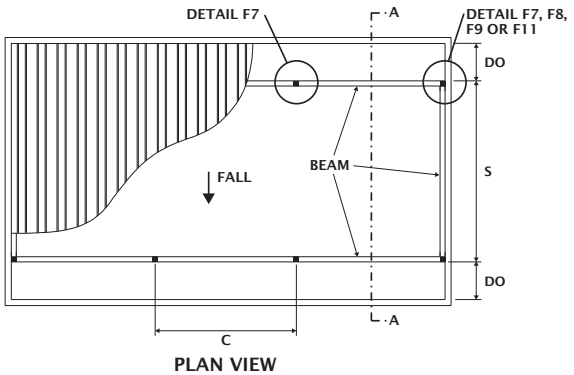
1. 300 x 300 x 600mm deep with 60mm corbel.
2. 350 x 350 x 650mm deep with 60mm corbel.
3. 450 x 450 x 750mm deep with 75mm corbel.



SECTION A-A



OPTIONAL BEAM OVERHANG



PLAN VIEW

STRATCO FLAT PATIOS & CARPORTS

Type 3F (Freestanding)
120 & 150 Beams

Maximum Allowable Spans (mm)																	
BEAM SIZE	SPAN S	L				M				H				VH			
		Beam Spacing B	Column Spacing C	Column Type	Footing Type	Beam Spacing B	Column Spacing C	Column Type	Footing Type	Beam Spacing B	Column Spacing C	Column Type	Footing Type	Beam Spacing B	Column Spacing C	Column Type	Footing Type
120 Beam	3000	4500	6500	1	1	4500	6500	1	1	4500	6500	1	2	3600	5800	1	3
	3600	4500	6250	1	1	4500	6250	1	2	4500	6050	1	3	3600	5250	1	3
	4200	4500	6050	1	1	4500	6050	1	2	4350	5700	1	3	3400	4900	1	3
	4800	4500	5850	1	1	3900	5550	1	2	3300	5150	1	3	2600	4750	1	3
	5400	4100	5800	1	2	3050	5400	1	3	2600	5200	1	3	2050	4500	2	3
	6000	3300	5800	1	2	2450	5250	1	3	2100	4850	1	3	1650	4500	2	4
	6600	2150	5700	1	2	2000	5100	1	3	1700	4850	2	3	1350	4250	2	4
	7200	1300	5300	1	2	1300	4800	1	3	1300	4450	2	3	1050	3950	2	4
BO MAX:		500				500				500				500			
150 Beam	3000	4500	7650	1	2	4500	7650	1	2	4500	7650	1	3	3600	7600	2	3
	3600	4500	7400	1	2	4500	7400	1	2	4500	7400	1	3	3600	7000	2	3
	4200	4500	7200	1	2	4500	7200	1	3	4500	6800	1	3	3600	6200	2	3
	4800	4500	7050	1	2	4500	6900	1	3	4400	6400	2	3	3450	5750	2	4
	5400	4500	6850	1	2	4500	6500	1	3	3900	6000	2	3	3050	5600	2	4
	6000	4500	6700	1	3	3850	6200	1	3	3250	5950	2	4	2550	5400	2	4
	6600	4250	6650	1	3	3150	6350	2	3	2700	5750	2	4	2100	5050	2	4
	7200	3200	6600	1	3	2650	5950	2	3	2250	5550	2	4	1750	4650	2	4
	7800	2050	6500	1	3	2050	6150	2	3	1900	5250	2	4	1500	4500	2	4
	8400	1250	5950	1	3	1250	5500	2	3	1250	5000	2	4	1250	4000	2	4
BO MAX:		500				500				500				200			

Notes & Requirements

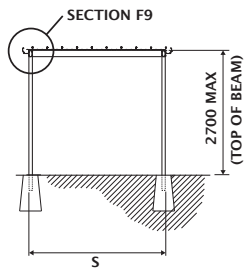
1. These tables must be read in conjunction with General Notes and detail drawings on pages 2.6 - 2.7.
2. Span S is the distance between the outside faces of the fascia beams. Beam spacing B is the distance between beam centres. Column spacing C is the distance between column centres. Beam overhang BO is the distance between the column centre and the outside face of side beam. Deck overhang DO is the distance between the outside face of the fascia beam and the inside edge of the gutter.
3. The back span shall be a minimum 1.5 x BO for units with a beam overhang.
4. Spans shown allow for a maximum 600mm deck overhang DO which may be added to the beam overhang BO to give total overhang.
5. In addition to the maximum column spacing allocated, all columns must be located within 500mm of a beam location.
6. Columns on freestanding units of up to 2400mm height may be fixed to existing concrete slab using the footing plate detail shown on page 2.6.
7. Storage/Vehicles under freestanding patios or carports must not block more than 50% of the open area of any one side.
8. Interpolation may be used for values required between those shown in the tables.

Columns

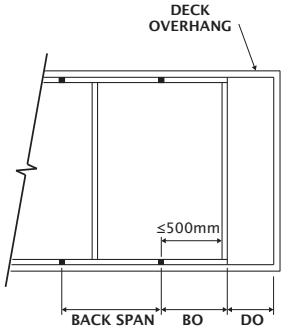
1. 65 x 65 x 2.5 SHS
2. 75 x 75 x 2.5 SHS

Footings

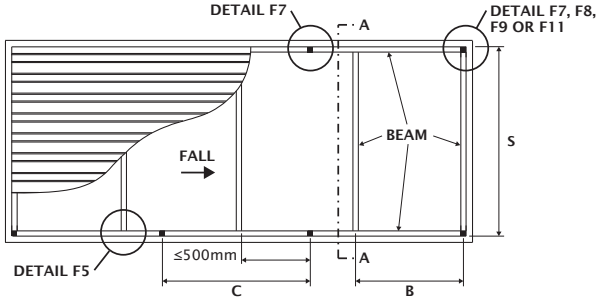
1. 300 x 300 x 600mm deep with 60mm corbel.
2. 350 x 350 x 650mm deep with 60mm corbel.
3. 450 x 450 x 750mm deep with 75mm corbel.
4. 550 x 550 x 750mm deep with 75mm corbel.



SECTION A-A



OPTIONAL BEAM AND/OR DECK OVERHANG



PLAN VIEW

STRATCO FLAT PATIOS & CARPORTS

Type 4F (Freestanding) 120 & 150 Beams

Maximum Allowable Spans (mm)																	
BEAM SIZE	SPAN S	L				M				H				VH			
		Beam Spacing B	Column Spacing C	Column Type	Footing Type	Beam Spacing B	Column Spacing C	Column Type	Footing Type	Beam Spacing B	Column Spacing C	Column Type	Footing Type	Beam Spacing B	Column Spacing C	Column Type	Footing Type
120 Beam	3600	6800	6850	1	2	6750	5850	1	2	5750	5500	1	3	4550	5000	2	3
	3900	6700	6650	1	2	5750	5800	1	2	4900	5450	1	3	3900	5000	2	3
	4200	6600	6450	1	2	4950	5800	1	2	4250	5450	1	3	3350	4750	2	3
	4500	5750	6400	1	2	4300	5750	1	2	3700	5200	1	3	2900	4500	2	3
	4800	5050	6400	1	2	3800	5450	1	2	3250	4950	1	3	2550	4350	2	3
	5100	4450	6200	1	2	3350	5200	1	2	2850	4750	1	3	2250	4250	2	3
	5400	3850	5800	1	2	3000	5000	1	2	2550	4700	1	3	2000	4200	2	3
	5700	3250	5550	1	2	2650	4950	1	2	2300	4600	1	3	1800	4100	2	3
	6000	2750	5450	1	2	2400	4900	1	3	2050	4500	1	3	1600	4050	2	3
BO MAX:		500				500				500				200			
150 Beam	3600	7950	8200	1	2	7950	7300	1	3	7950	6750	2	3	7050	6000	2	3
	4200	7750	8050	1	2	7650	6850	1	3	6550	6400	2	3	5150	5900	2	4
	4800	7550	7550	1	2	5850	6800	2	3	5000	6400	2	3	3950	5600	2	4
	5400	6150	7500	1	3	4600	6450	2	3	3950	5850	2	3	3100	5150	2	4
	6000	4950	7050	1	3	3750	6000	2	3	3200	5550	2	3	2500	4800	2	4
	6600	4100	6600	1	3	3050	5800	2	3	2650	5400	2	4	2050	4450	2	4
	7200	3400	6400	1	3	2550	5550	2	3	2200	5200	2	4	1750	4200	2	4
	7800	2900	5950	1	3	2200	5450	2	3	1850	5050	2	4	1450	3900	2	4
	8400	2350	5400	1	3	1850	5150	2	3	1600	4800	2	4	1250	3750	2	4
BO MAX:		500				500				500				200			

Notes & Requirements

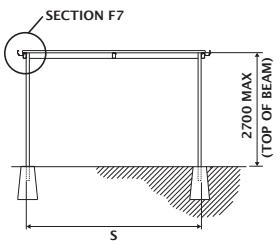
1. These tables must be read in conjunction with General Notes and detail drawings on pages 2.6 - 2.7.
2. Span S is the distance between the outside faces of the fascia beams. Beam spacing B is the distance between beam centres. Column spacing C is the distance between column centres. Beam overhang BO is the distance between the column centre and the outside face of the side beam. Deck overhang DO is the distance between the outside face of the fascia beam and the inside edge of the gutter.
3. The back span shall be a minimum 1.5 x BO for units with a beam overhang.
4. Spans shown allow for a maximum 600mm deck overhang DO.
5. In addition to the maximum column spacing allocated, all columns must be located within 500mm of a beam location.
6. Columns on freestanding units of up to 2400mm height may be fixed to existing concrete slab using the footing plate detail shown on page 2.6.
7. The purlins must be positioned mid-span of distance S.
8. Storage/Vehicles under freestanding patios or carports must not block more than 50% of the open area of any one side.
9. Interpolation may be used for values required between those shown in the tables.

Columns

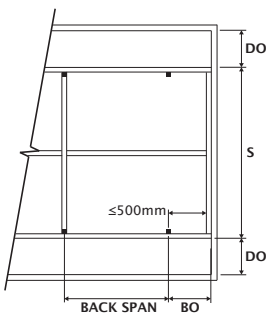
1. 65 x 65 x 2.5 RHS
2. 75 x 75 x 2.5 RHS

Footings

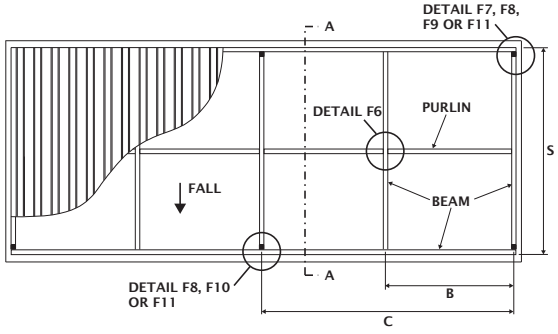
1. 300 x 300 x 600mm deep with 60mm corbel.
2. 350 x 350 x 650mm deep with 60mm corbel.
3. 450 x 450 x 750mm deep with 75mm corbel.
4. 550 x 550 x 750mm deep with 75mm corbel.



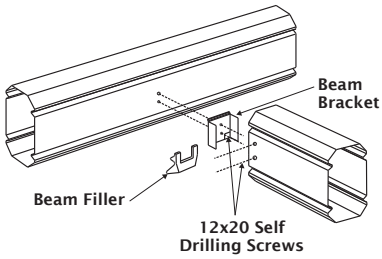
SECTION A-A



OPTIONAL BEAM AND/OR DECK OVERHANG

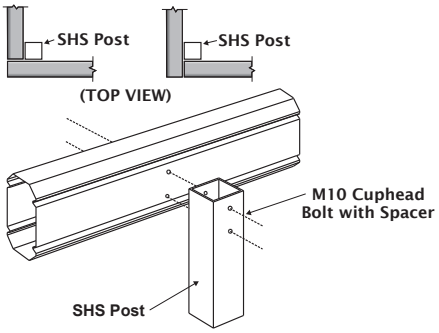


PLAN VIEW



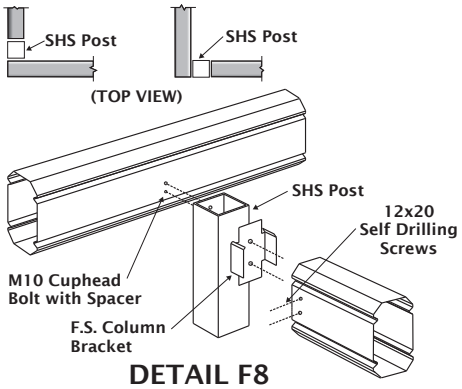
DETAIL F5

DETAIL F7(a) DETAIL F7(b)

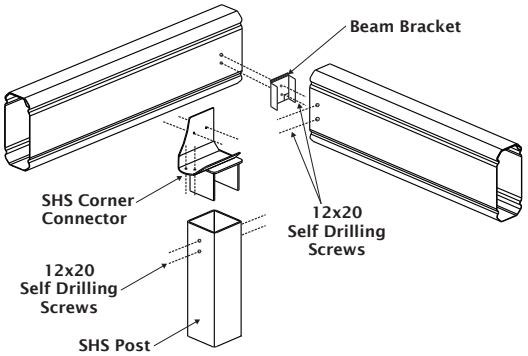


DETAIL F7

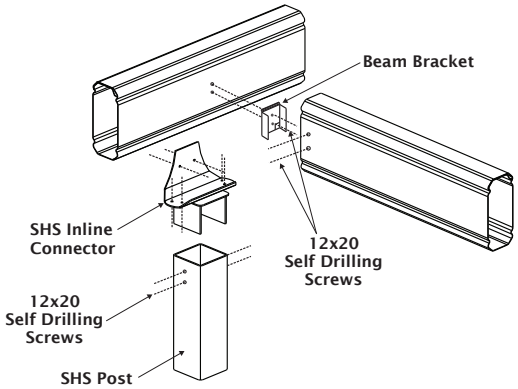
DETAIL F8(a) DETAIL F8(b)



DETAIL F8

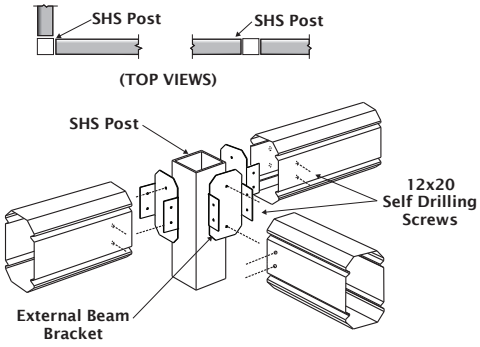


DETAIL F9

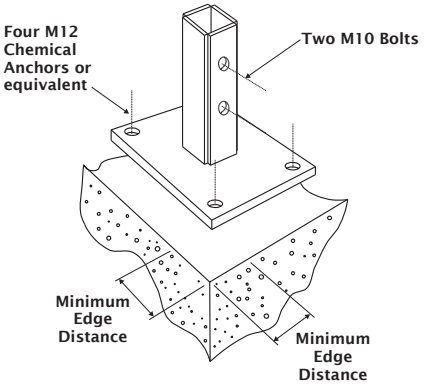


DETAIL F10

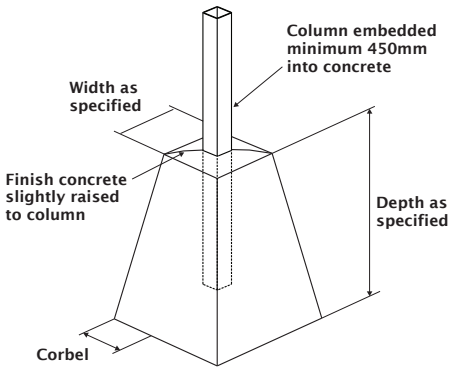
DETAIL F11(a) DETAIL F11(b)



DETAIL F11

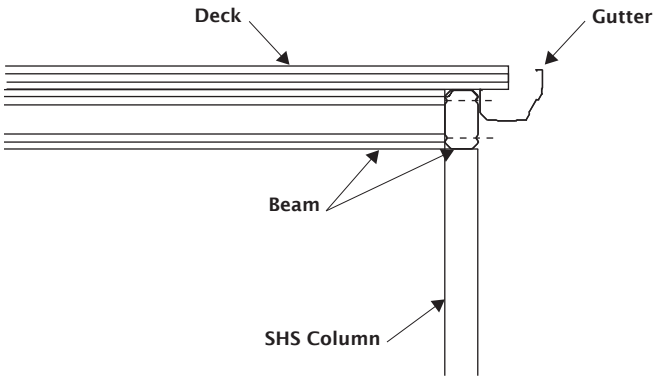


FREESTANDING
VERANDAH
FOOTING PLATE

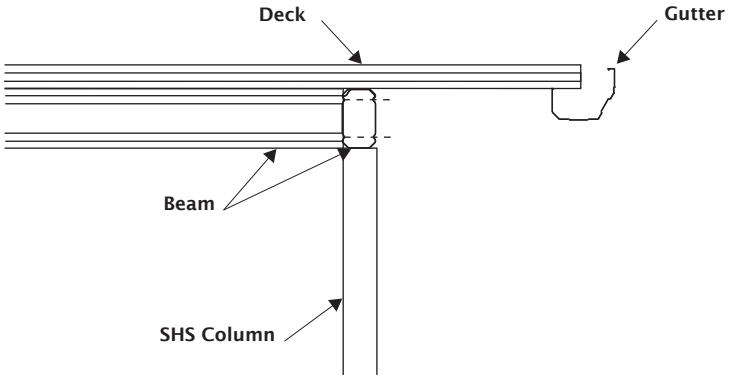


FOOTING

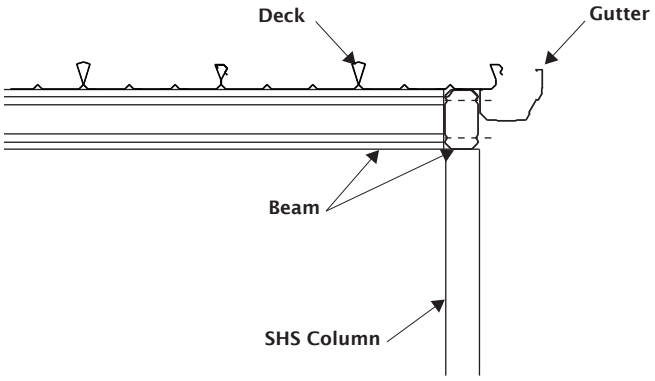
Note: The minimum edge distance is 70mm for M10 anchors, 75mm for M12 anchors and 120mm for M16 anchors.



SECTION F7

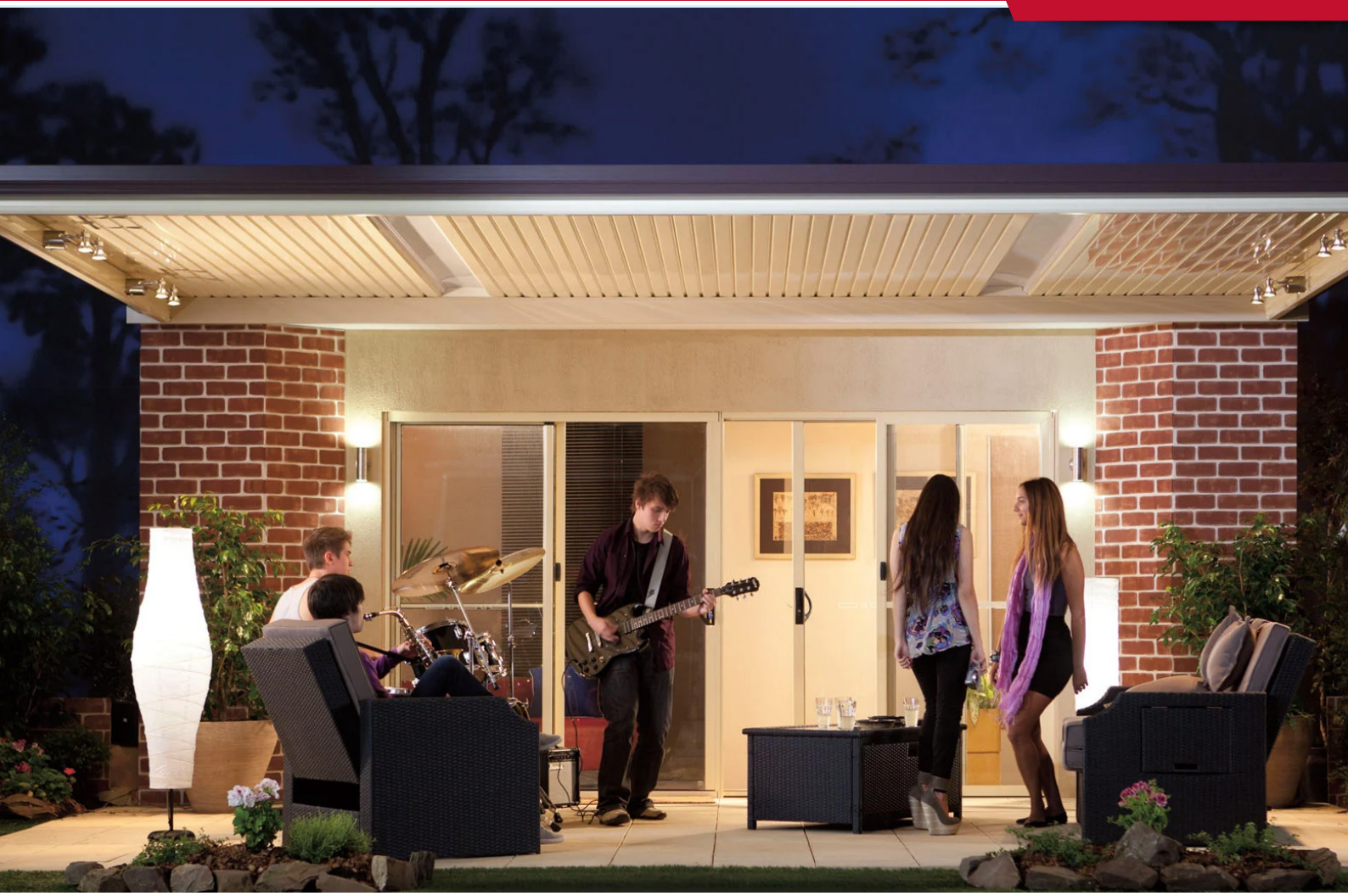


SECTION F8



SECTION F9

PATIOS



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