

STRAMIT SUNSET® PATIO BEAM

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Span Tables For Non-Cyclonic Areas



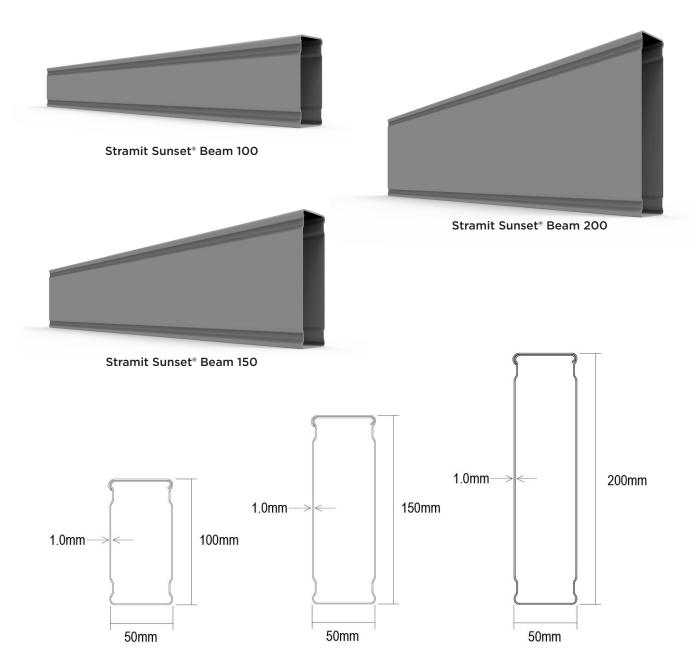
stramit.com.au

STRAMIT SUNSET® PATIO BEAM

FEATURES AND BENEFITS

- One-piece innovative design
- Manufactured from COLORBOND[®] steel
- Available in lengths up to 9m for large spans
- Australian-made

- Excellent performance
- Can be cut to length
- Large range of complementary accessories available, powder-coated to match
- Performance tested and non-combustible



IMPORTANT NOTICE AND DISCLAIMER

The information contained within this brochure is for general use and information only. Before application in a particular situation, Stramit recommends that you obtain appropriate independent qualified expert advice confirming the suitability of product(s) and information in question for the application proposed. While Stramit accepts its legal obligations, be aware however that to the extent permitted by law, Stramit disclaims all liability (including liability for negligence) for all loss and damage resulting from the use of the information provided in this brochure.

STRAMIT SUNSET® PATIO BEAM TABLES

Stramit manufactures a range of roofing profiles for patio applications in conjunction with the Sunset[®] patio beam, offering a wide choice of styles and a high quality finish.

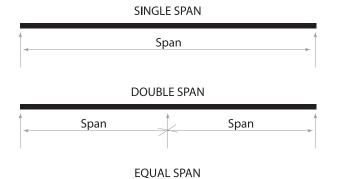
Stramit[®] patio roofing and Sunset[®] beam makes it easy to create elegant verandas, patios, barbecue areas and carports.

The span tables in this guide are for domestic applications in non-cyclonic regions. For other applications, contact Stramit for further information.

DESIGN NOTES

- The number of supports (posts or beams) affects the allowable span length. Data is given in each table for:
- Single Span: Two supports, one at each end
- Double Span: Three equi-spaced supports

Equal Spans: Four or more equi-spaced supports.



1	Span	1	Span	1	Span	

ADVERSE CONDITIONS

Stramit[®] Sunset[®] beam will give excellent durability in almost all locations. It is however important to choose the correct coating for each application environment as shown in the table below. Durability recommendations do vary based on the application of the product. Please read the tables below carefully.

Suitability of	Roof Beams - site exposure condition							
coating type	mild/moderate	severe marine	very severe marine					
COLORBOND*	~	×	×					

The approximate site exposure conditions in the table above are defined below.

Site exposure	Roof Beams - distance of site from						
condition	breaking surf/ exposed marine	calm marine					
mild/moderate	> 200m	> 100m					
severe marine	> 100m	> 0m					
very severe marine	> 0m	> 0m					

The suitability and exposure tables above are current at the time of publication and are guidelines only; conditions will vary from site to site. Please check the Bluescope Technical Bulletins at www.bluescopesteel.com.au for the latest information and guidance on selection, maintenance and durability. If uncertain about the appropriate coating for a particular application, or if the product is to be used in environments affected by industrial emissions, fossil fuel combustion, aminal farming, or has unwashed areas, please contact your nearest Stramit office for advice.

MATERIALS

Stramit Sunset[®] beams are manufactured from high tensile G550 colour coated steel with aluminum-zinc-magnesium alloy coated steel.

Colour coated steels are in accordance with AS/NZS 2728 - Category 3 and for the substrate, with AS1397.

Aluminum-zinc-magnesium alloy coated AM125 steel conforms to AS1397.

Stramit has a range of 6 colours as standard. Ask your nearest Stramit location for colour availability.

SUNSET[®] BEAM THICKNESS, GRADE AND MASS

BEAM DEPTH (mm)	BEAM WIDTH (mm)	THICKNESS BMT (mm)	STEEL GRADE	MASS (kg/m)		
100	50.0	1.0	G550	2.88		
150	50.0	1.0	G550	3.70		
200	50.0	1.0	G550	4.52		

STRAMIT SUNSET® BEAM CAPACITIES FOR NON-CYCLONIC AREAS

UPWARD LOADS

	MAX OUTWARD LOAD CAPACITY (kN/m)																		
SPAN	SINGLE SPAN							DOUBLE SPAN						EQUAL SPAN					
LENGTH		SUNS	SET® BEAI	M DEPTH	(mm)			SUNS	SET® BEA	M DEPTH ((mm)			SUNS	SET® BEA	M DEPTH	(mm)		
(mm)	1(00	1	50	2	00	1(00	1	50	20	00	1(00	1	50	20	00	
(11111)	Service	Strength	Service	Strength	Service	Strength	Service	Strength	Service	Strength	Service	Strength	Service	Strength	Service	Strength	Service	Strength	
2000	5.57	6.76	9.93	9.94	13.90	11.21	12.04	7.89	17.66	11.07	24.72	8.60	10.54	9.87	15.52	12.10	21.72	9.07	
2500	3.96	4.33	6.36	6.36	8.90	8.90	7.70	5.05	11.30	8.19	15.82	6.73	6.77	6.32	9.93	9.11	13.90	7.14	
3000	1.95	3.00	4.41	4.42	6.18	6.18	4.71	3.51	7.85	5.88	10.99	5.46	3.70	4.39	6.90	6.90	9.65	5.84	
3500	1.31	2.20	3.23	3.23	4.52	4.52	3.16	2.58	5.75	4.32	8.04	4.55	2.48	3.22	5.05	5.05	7.06	4.90	
4000	1.12	1.69	2.46	2.46	3.43	3.43	2.70	1.97	4.37	3.31	6.11	3.86	2.12	2.47	3.84	3.84	5.37	4.19	
4500	0.76	1.33	1.52	1.93	2.69	2.69	1.83	1.56	3.43	2.61	4.79	3.09	1.44	1.95	2.88	3.02	4.21	3.63	
5000			1.23	1.56	2.18	2.18			2.78	1.98	3.88	2.50			2.33	2.45	3.41	3.13	
5500			0.94	1.29	1.80	1.80			2.27	1.53	3.21	2.07			1.79	1.91	2.82	2.59	
6000			0.65	1.10	1.33	1.52			1.58	1.19	2.69	1.74			1.24	1.49	2.37	2.17	
6500					1.19	1.29					2.30	1.42					2.02	1.77	
7000					1.05	1.11					1.98	1.17					1.74	1.46	
7500					0.91	0.97					1.72	0.97					1.52	1.22	
8000					0.78	0.85					1.52	0.82					1.33	1.02	

Note:

1. Serviceability limit state load based on Span/150 deflection limit

Based on double skin of the beam at the top
 Accounts for hogging and sagging moment, shear and combined shear & bending checks

Strain does not recommend walking on the Subset® beams. Some testing has however been carried out on horizontal beams. For spans highlighted in the above table by italic font, it would be necessary to fix the layers of the top surface together using wafer head size 10-16x16 screws at 750mm centres.
 Connection of beam bracket to support must be checked.

DOWNWARD LOADS

	MAX INWARD LOAD CAPACITY (kN/m)																		
SPAN	SINGLE SPAN DOUBLE SPAN								EQUAL SPAN										
LENGTH		SUNS	SET® BEA	M DEPTH	(mm)			SUNS	Set® Beal	M DEPTH	(mm)		SUNSET® BEAM DEPTH (mm)						
(mm)	10	00	1	50	2	00	1	00	1	50	2	00	10	00	1	50	2	00	
(1111)	Service	Strength	Service	Strength	Service	Strength	Service	Strength	Service	Strength	Service	Strength	Service	Strength	Service	Strength	Service	Strength	
2000	2.82	7.89	8.11	13.22	15.09	11.21	6.79	6.76	19.57	9.94	28.13	8.48	5.33	8.45	15.36	11.49	24.72	8.98	
2500	2.02	5.05	5.56	8.46	10.13	8.97	4.86	4.33	13.40	6.36	18.01	6.59	3.81	5.41	10.52	7.95	15.82	7.03	
3000	1.22	3.51	3.00	5.88	5.58	7.03	2.93	3.00	7.24	4.42	12.50	5.31	2.30	3.76	5.68	5.52	10.57	5.72	
3500	0.80	2.58	1.71	4.32	3.18	5.15	1.93	2.20	4.12	3.23	7.66	4.39	1.51	2.75	3.23	4.04	6.01	4.77	
4000	0.64	1.97	1.25	3.31	2.33	3.93	1.54	1.69	3.02	2.46	5.62	3.43	1.21	2.11	2.37	3.08	4.41	4.05	
4500	0.48	1.56	0.80	2.61	1.49	3.09	1.16	1.33	1.92	1.93	3.59	2.69	0.91	1.66	1.51	2.41	2.81	3.37	
5000			0.69	1.98	1.25	2.50			1.66	1.56	3.01	2.18			1.31	1.96	2.36	2.73	
5500			0.58	1.53	1.01	2.07			1.41	1.29	2.44	1.80			1.11	1.62	1.92	2.25	
6000			0.48	1.19	0.77	1.74			1.15	1.10	1.87	1.52			0.91	1.38	1.47	1.89	
6500					0.70	1.42					1.68	1.29					1.32	1.61	
7000					0.62	1.17					1.50	1.11					1.17	1.39	
7500					0.54	0.97					1.31	0.97					1.03	1.21	
8000					0.47	0.82					1.12	0.85					0.88	1.07	

Note: 1.Serviceability limit state load based on Span/300 deflection limit

Based on double skin of the beam at the top
 Accounts for hogging and sagging moment, shear and combined shear & bending checks

4. Stramit does not recommend walking on the Sunset* beams. Some testing has however been carried out on horizontal beams. For spans highlighted in the above table by italic font, it would be necessary to fix the layers of the top surface together using wafer head size 10-16x16 screws at 750mm centres. 5. Connection of beam bracket to support must be checked.

Stramit does not recommend walking on the Sunset® beam. Limited testing on horizontal beams have shown limitations to span lengths shown below.

SUNSET [®] BEAM MAXIMUM SPAN FOR FOOT TRAFFIC								
BEAM	THICKNESS	MAX SPAN	MAX SPAN					
DEPTH	BMT	FOOT TRAFFIC	FOOT TRAFFIC*					
(mm)	(mm)	(mm)	(mm)					
100	1.0	4500						
150	1.0	4500	6000					
200	1.0	6000	8000					

* These spans need fixing together of two beam layers at top with wafer head size 10-16x16mm screws, 750mm apart.

BRACKET DETAILS

FASTENING REQUIREMENTS

The numbers/details of screws used on the beams are as follows:

100, 150: To attach a Frame Bracket to a main support: 4 screws through the back face of the bracket.

To attach a Beam to a Frame Bracket: 2 screws through each side of the web (brackets have pre-drilled holes), total: 4

200: To attach a Frame Bracket to a main support:6 screws through the back face of the bracket.

PROCUREMENT

PRICES

Prices of Stramit[®] beams and accessories can be obtained from your nearest Stramit location or distributor of Stramit[®] products. As Stramit does not provide an installation service, ask your tradesperson for a supply and fix price. Contact your nearest Stramit location for the names of tradespersons in your area.

LENGTH

Stramit[®] beams are supplied cut-to-length. When designing or transporting long products ensure that the length is within the limit of the local transport authority regulations. The manufacturing tolerance on the length of product supplied is +0, -15mm.

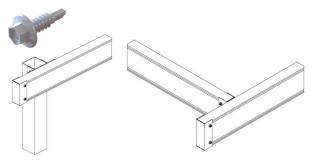
ORDERING

Stramit[®] beams can be ordered directly, through distributors, or supplied and fixed by a patio installer.

DELIVERY/UNLOADING

Contact your local Stramit office for more information on lead time to your area, as timing will be subject to the delivery location, quantity and material availability, or can be at a prearranged date and time. Please ensure that suitable arrangements have been made for truck unloading, as this is the responsibility of the receiver. Pack mass may be up to 300kg. To attach a Beam to a Frame Bracket: 3 screws at each side of the web (brackets have pre-drilled holes), total: 6

Screws: hex-head screws 12-14x20mm



HANDLING/STORAGE

Stramit[®] beams should be handled with care at all times to preserve the product capabilities and quality of the finish. Packs should always be kept dry and stored above ground level while on site. If the beams become wet, they should be separated, wiped and placed in the open to promote drying.

ADDITIONAL INFORMATION

As well as our standard range of Technical Manuals, Installation Leaflets, Case Studies and other promotional literature, Stramit has a series of guides to aid design.

These include:

Crimping

- Roof Slope Guide
- Foot Traffic Guide
- Concealed Fixed Decking
- Bullnosing, Curving and
- Acoustic Panels
- Cyclonic Areas
- Spring Curving Guide

Please contact your nearest Stramit location or visit www.stramit.com.au to download Stramit literature.

OTHER PRODUCTS

Stramit offers a wide range of building products, including:

- Purlins and girts
- Formwork decking
- Roof and wall sheeting
- Lightweight structural sections
- Truss components
- Gutters and downpipes
 Fascia
- Custom flashing
- Insulating products
- Fasteners

For additional and comprehensive information on individual roofing products refer to Stramit's technical literature, available from any Stramit branch or the Stramit website **www.stramit.com.au**

CONTACT US

Visit stramit.com.au or contact us using the details below.

REGION	LOCATION	CONTACT DETAILS	TECHNICAL ENQUIRIES			
	SYDNEY 33-83 Quarry Rd, Erskine Park NSW 2759	Ph 02 9834 0909				
	CANBERRA 4 Bass St, Queanbeyan NSW 2620	Ph 02 6298 2500				
NSW & ACT	COFFS HARBOUR 6 Mansbridge Dr, Coffs Harbour NSW 2450	Ph 02 6656 3800	Ph 02 9834 0964			
	NEWCASTLE 17 Nelson Rd, Cardiff NSW 2285	Ph 02 4041 3400				
	ORANGE 51 Leewood Dr, Orange NSW 2800	Ph 02 6360 9200				
	MELBOURNE 3/1464 Ferntree Gully Rd, Knoxfield VIC 3180	Ph 03 9237 6300				
VIC	ALBURY 18 Ariel Dr, Albury NSW 2640	Ph 02 6092 3700	Ph 03 9237 6353			
	BENDIGO Lot 7-9 Ramsay Court, Kangaroo Flat VIC 3555	Ph 03 5448 6400				
TAS	HOBART 57 Crooked Billett Dr, Brighton TAS 7030	Ph 03 6262 8788	Ph 03 9237 6353			
SA	ADELAIDE 11 Stock Rd, Cavan SA 5094	Ph 08 8219 2000	Ph 08 9493 8823			
	BRISBANE 57-71 Platinum St, Crestmead QLD 4132	Ph 07 3803 9999				
SOUTH QLD	MARYBOROUGH 10 Activity St, Maryborough QLD 4650	Ph 07 4123 9500	Ph 07 3803 9869			
	ROCKHAMPTON 41 Johnson St, Parkhurst QLD 4702	Ph 07 4921 5600				
NORTH	CAIRNS 53 Vickers St, Edmonton QLD 4869	Ph 07 4034 6555	Ph 07 3803 9869			
QLD	TOWNSVILLE 402-408 Bayswater Rd, Garbutt QLD 4814	Ph 07 4412 3900	FILO7 3003 3003			
WA	PERTH 605-615 Bickley Rd, Maddington WA 6109	Ph 08 9493 8800	Ph 08 9493 8823			

Talk to your local Stramit account manager to find out more.

Please contact us at techsupport@stramit.com.au for product installation instructions and further technical support.

The COLORBOND* steel colour swatches and images shown have been reproduced to represent actual product colours as accurately as possible. However, we recommend checking your chosen colour against an actual sample of the product before purchasing, as varying light conditions and limitations of the printing process may affect colour tones. COLORBOND*, INICALUME* and * colour names are registered trade marks of BlueScope Steel Limited.[™] colour names are trade marks of BlueScope Steel Limited. ABN 16 000 011 058.

Many colours and finishes are kept in stock for fast manufacture and delivery. However, some colours and finishes require longer lead times and, in some cases, minimum order quantities. Check with your Stramit Building Products representative before ordering. Note that not all products are available in all finishes.

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