STRAMIT SUNSET®
PATIO PANEL

Technical Manual

SELECTION AND SPECIFICATION

PATIO PANEL

THE STRAMIT SUNSET® PATIO PANEL IS A PURPOSE-DESIGNED ROOFING MATERIAL FOR HOME IMPROVEMENT PROJECTS SUCH AS PATIOS, VERANDAS, BOAT SHEDS AND CARPORTS. WIDE PANS AND ATTRACTIVE RIBS ENHANCE THE APPEARANCE OF THE ROOF, WHILE THE INTERLOCKING RIB DESIGN SIMPLIFIES INSTALLATION.
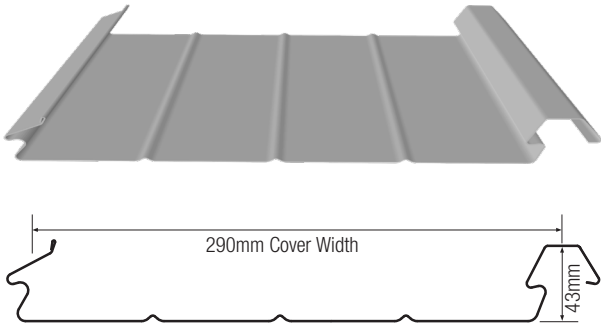

IMPORTANT NOTICE AND DISCLAIMER

INTRODUCTION

The Stramit Sunset® Patio Panel features a unique interlocking rib design that simplifies installation and secures the panels together, providing a strong and weather-resistant seal. Translucent panels are also available to allow natural illumination of covered areas.

290mm Cover Width

43mm

FEATURES AND BENEFITS

- Flat panellised design – Enhanced aesthetic appeal.
- High tensile steel – Light weight and high strength.
- Fully tested – Complete load performance tables.
- Interlocking ribs – Enhanced security and appearance.
- 1° minimum pitch – Low roof pitch with excellent drainage capacity.
- 290mm cover – Quick installation and easy handling.
- Interlocking panels – Strength and weather-resistance.
- Translucent panels – Natural illumination.
- Proudly Australian Made

MATERIAL

Stramit Sunset® Patio Panel is manufactured from high-tensile G550 BlueScope COLORBOND® steel in accordance with AS/NZS 2728:2013 - Type 4 and, for the substrate, with AS 1397:2021.

STRAMIT SUNSET® PATIO PANEL - SHEETING MASS (kg/m² of roof area)	
THICKNESS BMT	COLORBOND® Double Sided
0.42mm	5.76

For further information on available materials contact your nearest Stramit location or distributor of Stramit® products.

MINIMUM ROOF SLOPE

A minimum roof slope of only 1° is required to ensure effective drainage. However, because the self-weight of the panels causes natural curvature, a minimum slope of 2° applies to spans greater than 4 metres.

TESTING

Stramit Building Products employs in-house, purpose-built testing equipment to design, develop and improve products for the Australian market. In addition, many Stramit® products are tested or witnessed by independent organizations, including The University of Sydney and the Cyclone Testing Station at James Cook University.
This ongoing research and development ensures that Stramit Building Products remains at the forefront of innovation, design and customer information.
Testing is conducted in accordance with AS 1562.1:2018 and AS 4040.

SPANS

Spans may be selected using the Span Chart or a combination of the Pressures and Foot Traffic tables.

			STRAMIT SUNSET® PANEL - SPAN CHART (mm)				
CRITERION	Design Pressure (kPa)	Deflection	Min. Slope ◊	Foot traffic#	Max single span	Max double span	Max overhang**
OPTION 1	0.55 (serv) 1.30 (str)	Controlled	1°	Light only	2300	2900	500*
OPTION 2	1.30 (strength only)	Acceptable	2°	None	4500	4300	500*

See page 5 for explanation of foot traffic classification.
* Walking on edge-panel or panel next to translucent panel is not permitted on an overhang.
** Maximum overhang when attached to a gutter or channel section.
◊ Minimum slope along entire roof length

- Design pressures assumed are 0.55 kPa for serviceability and 1.30 kPa for strength. This is suitable for regions A & B sheltered suburban and region A exposed suburban areas, based on design gust wind speeds of up to 26m/s for serviceability and 40m/s for strength corresponding to N1 and N2 site wind classifications in AS 4055:2021.

- Foot traffic and wind uplift deflection as per AS 1562.1:2018.

- For more specific applications the Stramit Sunset® Panel must be designed to the pressure and foot traffic limitations below.

- Support members must be sufficiently strong to sustain the above design loads.

PRESSURES

The tables below are based on 2 screws per panel. Alternatively, 4 aluminium rivets per panel may be used but the strength limit state capacities shown here must be reduced by 10%.

		STRAMIT SUNSET® PANEL - SERVICEABILITY LIMIT STATE WIND UPLIFT CAPACITY									
thickness bmt (mm)	span type	pressure (kPa) at the spans (mm) shown									
		1800	2100	2400	2700	3000	3300	3600	3900	4200	4500
0.42	single	0.87	0.69	0.57	0.48	0.42	0.37	0.34	0.31	0.27	0.21
	double	0.86	0.75	0.67	0.61	0.56	0.51	0.48	0.45	0.42	0.40
	single + cantilever	0.84	0.69	0.57	0.48	0.40	0.35	0.31	0.28	0.26	0.23
	double + cantilever	0.90	0.77	0.66	0.59	0.53	0.48	0.43	0.40	0.37	0.34

		STRAMIT SUNSET® PANEL - STRENGTH LIMIT STATE WIND UPLIFT CAPACITY (NON-CYCLONIC)									
thickness bmt (mm)	span type	pressure (kPa) at the spans (mm) shown									
		1800	2100	2400	2700	3000	3300	3600	3900	4200	4500
0.42	single	4.99	4.14	3.53	3.08	2.72	2.42	2.15	1.92	1.75	1.68
	double	4.80	3.87	3.16	2.65	2.26	1.96	1.72	1.52	1.36	1.22
	single + cantilever	4.24	3.58	3.07	2.69	2.41	2.19	2.03	1.88	1.72	1.53
	double + cantilever	4.11	3.37	2.83	2.43	2.12	1.88	1.68	1.51	1.38	1.26

Note: Maximum cantilever is 500mm, when attached to guttering or a channel section.

FOOT TRAFFIC

Foot traffic limits for Stramit Sunset® Patio Panel are shown for two alternative foot traffic categories:

- LIGHT ONLY: Maximum span for 1.1kN (controlled foot traffic, i.e. experienced personnel walking only on pans, based on R2 - Other roofs in AS/NZS 1170.1:2002).

- NONE: Maximum span for 0.5kN (loads applied via ladder or boards - minimum design value for roofs permitted by AS/NZS 1170.1:2002).

STRAMIT SUNSET® PANEL - FOOT TRAFFIC LIMITED SPANS			
thickness bmt (mm)	span type	Max span for controlled foot traffic (mm)	Max span for 0.5kN ladder load (mm)
0.42	single	2300	4500
	double	3000	4500
	cantilever#	500*	500

\# When attached to guttering or a channel section.
* Walking on edge-sheet or sheet next to translucent panel not permitted on cantilever.

Note: Walking on translucent panels is not permitted at any time.

INSTALLATION AND FIXING

Stramit Sunset® Patio Panels may be fixed to support beams, suitably designed receiver channels or to other members with sufficient strength.

To install Stramit Sunset® Patio Panel effectively, in a typical receiver channel installation:

1. Insert foam strip tightly into receiver channel

2. To ensure successful interlocking connections, remove the protective plastic coating from the overlapping rib section.

3. Lay the first Sunset® panel resting between beam and lower lip of receiver channel, ensuring the panel is pushed firmly up against the foam insert. Leave a minimum overhang of 50mm at the beam end.
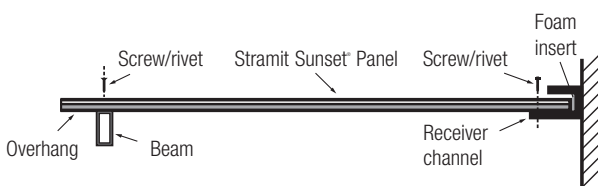
Note: Wall structure must be solid and strong enough to support a fully installed system.

4. Secure first panel at beam end using the recommended downward facing fasteners in the correct pan locations. Tighten fasteners just enough so that the sealing washer provides a watertight seal.

5. Secure receiver channel end using recommended fasteners fixed from above. Do not over-tighten.

6. Attach second panel slightly away from the top lip of the receiver channel. To position the second panel, place the overlap rib on top of the underlap rib of the previously installed sheet, and allow the panel to fall into place (Fig. 1).

To secure the interlocking rib connection, begin at one end of the overlap and simultaneously push down and pull back on the overlap edge until the ribs "click" together (Fig. 2). Continue along the rib in one direction only. The panel ribs will automatically lock into position.

Note: Rib interlocking can be assisted by pulling on the overlap while tapping the rib sides with a rubber mallet, working along the rib in one direction.

7. Slide the second panel up into the receiver channel (Fig. 3).
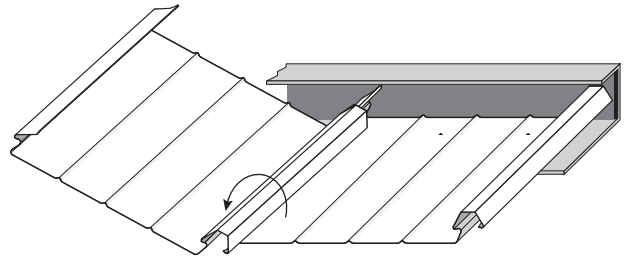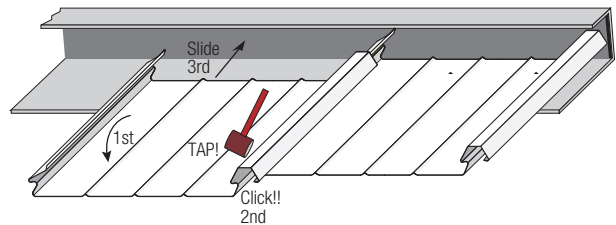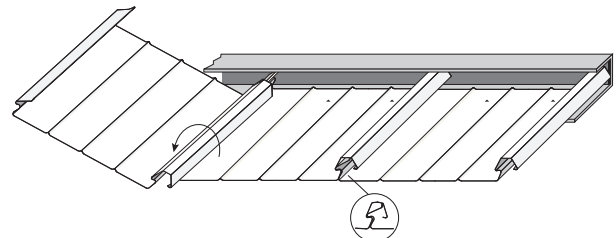
"Position-Click-Slide-Secure"
Figure 1.

Figure 2.

Note: When locking ribs into position work in one direction only.

Figure 3.


SECURING INTERLOCKING RIBS

Connecting the overlapping ribs may require a little practice at first. Work along the length of the rib and "tuck-in" the underlap by pushing down on the overlap at an oblique angle, while simultaneously pulling back on it.

8. Secure the panel as before using recommended fasteners and pan locations.

9. Repeat procedure until all panels are laid.

10. Insert Stramit Sunset® Patio Panel shaped foam inserts using neutral cure silicone to secure and ensure a good weatherproof seal.

11. Attach weather flashing if required.

Shaped foam insert   Weather Flashing
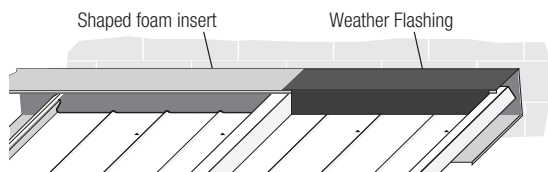
12. Fix gutters, flashing (including edge flashing) or downpipes.

   Note: When fixing the upper end of Stramit Sunset® Patio Panels to a support beam, note that the panel ends must be turned up and suitable flashing installed to avoid water running along the underside of the panels.

FASTENERS

All fastening screws must conform to AS 3566 – suitable for minimum corrosivity category 3. They are to be hexagon headed and must be used with sealing washers.

 For steel – No. 10 x 16mm hex-head self-drilling, self-tapping screws. Used for downward fixing of panel to support or receiver channel from above.

 – 4.8mm diameter aluminium pop rivets.
Used for downward fixing of panel to receiver channel from above.

 – No. 12x35mm hex-head self-drilling, with dome washer. Used for downward fixing of translucent ribs to steel panel ribs (requires 10mm pilot hole).

 For timber No. 10 x 25mm hex-head self-drilling Type 17 screws. Used for downward fixing of panel pans to support or receiver channel. Add 10 mm to screw length for softwood applications.

FASTENER LOCATIONS

SCREW FIXING LOCATIONS
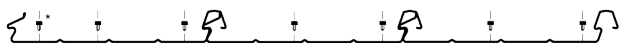
2 screws per panel fixed downwards at each support
* Extra screw for edge panel fixed downwards.
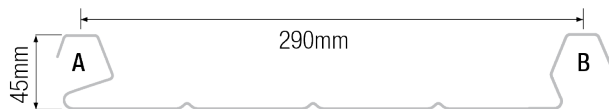
RIVET FIXING LOCATIONS

4 rivets per sheet fixed downwards.
* Extra rivet for edge sheets

INSTALLING TRANSLUCENT PANELS

The following guidelines should be used when installing a translucent panel.

- The translucent panel should be attached to at least one steel Stramit Sunset® Panel on the ground first.

- Before a translucent panel can be placed, there must be at least two steel Stramit Sunset® Panels laid. This can include the pre-attached steel panel.

- Two translucent panels cannot be laid next to each other.

1. Pre-cut a notch in the translucent rib, at the receiver channel end only, to allow installation of foam insert.
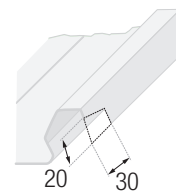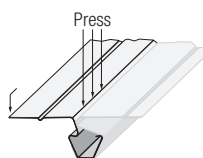
2. To fix the translucent panel to a steel panel, it is recommended that the translucent panel first be turned upside down.

3. With the translucent and steel sheets held at right angles, insert the steel panel overlap rib into the translucent overlap rib.
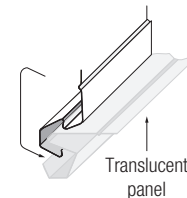
4. Rotate the steel panel into position, then firmly press down on the rib union until it securely locks into place.

5. Flip the attached panels over to the correct orientation and drop them into position on the last fixed steel panel. Press firmly on all rib unions to secure the join, then slide the panels into the receiver channel.
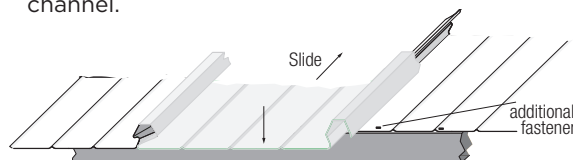

Note: A Stramit Sunset® steel panel fixed to a translucent panel is classed as an edge sheet, therefore an additional fastener is required at each support.

6. Secure using recommended fasteners at the correct rib location and orientation.

Note: Fasteners should be fixed at minimum 1000mm spacings along the translucent panel. The ends of panels attached to a beam and receiver channel are to be fixed as close as possible to these supports.
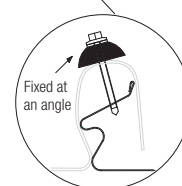
7. The next Stramit Sunset® Panel should then be attached using the "position, click, slide, secure" procedure.

SUPPORT FIXINGS

Adequate fixing to supports is essential. Long spanning roofs are usually limited by their support fixings. Pan fixing to beams using screws fixed from above is generally satisfactory. However, attaching panels to a receiving channel or back channel can be difficult. Span data provided here is based on four carefully positioned rivets, which will generally suffice, provided the rivets are fixed from above. For further information, contact Stramit Building Products.

Attaching the receiving channel to a wall or supporting structure may be critical and therefore must be designed to suit each application. In no case should there be fewer than one wall fixing per panel. In some cases, many more may be required.

LENGTHS

Stramit Sunset® Patio Panels are supplied cut-to-length. Manufacturing tolerance on length of product supplied is +0, -15mm.

ACCESSORIES

Stramit Sunset® Patio Panel comes with a range of accessories to complement the product.

Translucent Panels

Translucent panels are supplied in an Opal shade to complement the Stramit Sunset® Patio Panels gloss finish.

Receiver Channel

The Stramit Sunset® Receiver Channel is available in stock lengths with either zinc-aluminium or pre-painted coating.

Steel Framing

Information on framing posts, beams and associated accessories, including the correct connection and fixing procedures, are available from your nearest Stramit location.

Gutters, Flashing and Downpipes

To complete the final design, a full range of Stramit® standard and custom-made gutters, flashing and downpipes is available.

PRICES

Prices of Stramit Sunset® Patio Panels and accessories can be obtained from your nearest Stramit location or distributor of Stramit® products. As Stramit Building Products 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.

COLOURS AND FINISHES

Stramit Sunset® Patio Panel is available in a choice of attractive gloss or smooth finishes on both outer and inner surfaces. Colours and options available are:

STRAMIT SUNSET® PANEL COLOURS AND FINISHES	
Top Colour Standard	Underneath Colour Gloss
Classic Cream™	Classic Cream™
Woodland Grey®	Classic Cream™
Surfmist®	Dover White™
Paperbark®	Paperbark®

MATERIAL COMPATIBILITY

All building products need to be checked for compatibility with adjacent materials. These checks need to be for both direct contact between materials, and where water runs from one material to another. For this product non-compatibility includes green or treated timber, lead, copper, stainless steel and mortar or concrete. Contact Stramit Building Products for more detailed information.

PERSONAL PROTECTION EQUIPMENT

Wear safety glasses with side shields when cutting or trimming product. Cut-resistant or leather gloves must be worn when handling product. Foot protection must be worn when handling and transporting product.

HANDLING/STORAGE

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

CUTTING

Stramit Sunset® Patio Panels can be easily cut, where required, using a power saw with a steel cutting blade or a power nibbler and, for localised cutting, tin snips. Avoid the use of abrasive discs because these can cause burred edges and coating damage. Dispose of any off-cuts carefully.

CONTACT US

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

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

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.