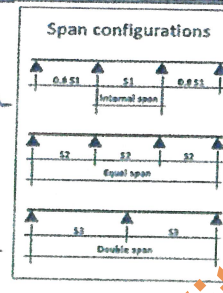
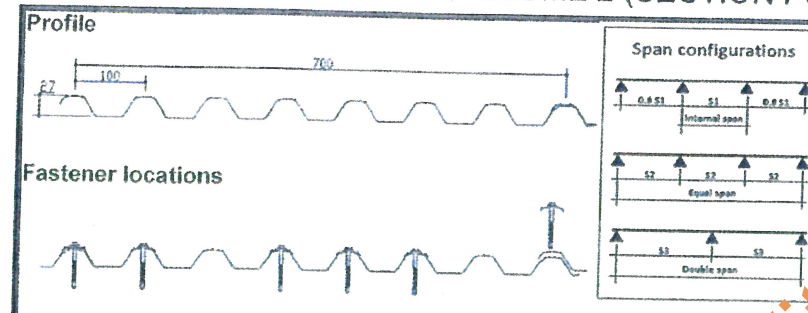


IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1), THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENT P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.



**STRAMIT LONGSPAN® RECOMMENDED FASTENINGS (CYCLONIC FIXING)**

STEEL 0.75mm thick	No 14 - 10 x 50mm Hex Head Type 17 screw + sealing washer + caps
STEEL 1.5mm thick	No 14 - 10 x 50mm Hex Head Self-drilling and tapping screw + sealing washer + caps
HARDWOOD (J2/JD2 or stronger)	No 14 - 10 x 65mm Hex Head Type 17 screw + sealing washer + caps
SOFTWOOD (F8/J4/JD4 or stronger)	No 14 - 10 x 75mm Hex Head Type 17 screw + sealing washer + caps
Side Laps	No 8 - 15 x 15mm Hex Head screw + sealing washer for spans exceeding 900mm

All fastening screws should conform to AS3566 Class 4.  
 Caps: Steel Caps (Cyclonic washers) assembly, complete with sealing washer. Use steel caps, minimum 30mm long, 35mm wide (across rib) and 1mm thick, G300 material. Data below not valid for caps which do not restrain the sides of the profile.

**STRAMIT LONGSPAN® CLADDING - STRENGTH LIMIT STATE CAPACITY (CYCLONIC)**  
 pressure (kPa) at the spans (mm) shown

Timber Batten/Steel $\geq 1.5$ mm	BMT fasteners (mm) per sheet	span type	Roof Sheeting (Crest fixed)					
			450	600	900	1200	1500	1800
0.42	5 with cyclone caps	internal	10.00	9.68	8.72	6.20	4.54	3.28
		equal	9.09	8.80	7.33	5.64	4.13	2.98
	double	internal	8.00	7.71	6.28	4.96	3.62	2.62
		equal	10.81	10.57	10.00	6.37	5.21	4.54
0.48	5 with cyclone caps	internal	9.83	9.61	9.09	5.79	4.41	4.13
		equal	8.61	8.46	8.00	5.16	4.13	3.63

**STRAMIT LONGSPAN® CLADDING - STRENGTH LIMIT STATE CAPACITY (CYCLONIC)**  
 pressure (kPa) at the spans (mm) shown

0.75mm Cyclonic Steel Battens	BMT fasteners (mm) per sheet	span type	Roof Sheeting (Crest fixed)					
			450	600	900	1200	1500	1800
0.42	5 with cyclone caps	internal	10.00	9.68	8.09	6.07	4.54	3.28
		equal	9.09	8.80	7.35	5.51	4.13	2.98
	double	internal	8.00	7.74	6.47	4.85	3.63	2.62
		equal	10.81	10.57	8.09	6.07	4.85	4.04
0.48	5 with cyclone caps	internal	9.83	9.61	7.35	5.51	4.41	3.67
		equal	8.65	8.46	6.47	4.85	3.88	3.23

note: Shaded areas are not foot trafficable when tested in accordance with AS1562 and AS4040 parts 0 and 1.

**STRAMIT LONGSPAN® CLADDING MAXIMUM SPAN CHART (mm)**  
 $C_{p,e} = -0.9$  ( $h/d \leq 0.5$ )

Crest fixed roof sheeting - five fasteners per sheet with cyclone caps

TC	h	local press. factor	pressure (kPa) Strength	Timber Battens / Steel 1.5mm						0.75mm Cyclonic Steel Battens					
				0.42mm thick (bmt)			0.48mm thick (bmt)			0.42mm thick (bmt)			0.48mm thick (bmt)		
				internal	equal	double	internal	equal	double	internal	equal	double	internal	equal	double
1&2	$\leq 10$ m	1.0	5.16	1350	1250	1150	1550	1350	1150	1350	1250	1100	1400	1250	1100
		1.5	6.61	1150	1050	950	1150	1100	1000	1100	1000	850	1100	1000	850
		2.0	8.06	950	850	-	1050	950	850	900	750	-	900	800	650
		3.0	10.96	-	-	-	-	-	-	-	-	-	-	-	-
1&2	$\leq 5$ m	1.0	4.54	1500	1400	1250	1800	1600	1350	1500	1400	1250	1600	1450	1250
		1.5	5.81	1250	1150	1050	1350	1150	1100	1250	1150	1000	1250	1150	1000
		2.0	7.09	1050	1000	850	1100	1050	950	1000	900	750	1000	900	800
		3.0	9.64	600	-	-	900	550	-	800	600	-	700	550	-
2.5	$\leq 10$ m	1.0	3.11	1800	1750	1650	1800	1800	1800	1800	1750	1650	1800	1800	1800
		1.5	3.99	1600	1500	1400	1800	1800	1600	1600	1500	1400	1800	1650	1450
		2.0	4.86	1400	1350	1200	1650	1450	1250	1400	1300	1150	1450	1350	1150
		3.0	6.62	1150	1050	950	1150	1100	1000	1100	1000	850	1100	1000	850
3&4	$\leq 5$ m	1.0	2.83	1800	1750	1700	1800	1800	1800	1800	1750	1700	1800	1800	1800
		1.5	3.63	1700	1600	1500	1800	1800	1800	1700	1600	1500	1800	1800	1600
		2.0	4.43	1500	1400	1300	1800	1650	1400	1500	1400	1300	1650	1450	1300
		3.0	6.02	1200	1150	1000	1250	1150	1100	1200	1100	950	1200	1100	950

**STRAMIT LONGSPAN® CLADDING MAXIMUM SPAN CHART (mm)**  
 $C_{p,e} = -1.3$  ( $h/d \geq 1.0$ )

Crest fixed roof sheeting - five fasteners per sheet with cyclone caps

TC	h	local press. factor	pressure (kPa) Strength	Timber Battens / Steel 1.5mm						0.75mm Cyclonic Steel Battens					
				0.42mm thick (bmt)			0.48mm thick (bmt)			0.42mm thick (bmt)			0.48mm thick (bmt)		
				internal	equal	double	internal	equal	double	internal	equal	double	internal	equal	double
1&2	$\leq 10$ m	1.0	6.45	1150	1050	950	1150	1100	1050	1100	1000	900	1100	1000	900
		1.5	8.55	900	650	-	1000	900	500	800	650	-	800	700	500
		2.0	10.64	-	-	-	550	-	-	-	-	-	550	-	-
		3.0	11.93	-	-	-	-	-	-	-	-	-	-	-	-
1&2	$\leq 5$ m	1.0	5.67	1250	1150	1050	1350	1200	1100	1250	1150	1000	1250	1150	1000
		1.5	7.51	1000	950	650	1100	1000	950	950	850	650	950	850	700
		2.0	9.35	700	-	-	950	750	-	650	-	-	700	600	-
		3.0	10.49	-	-	-	600	-	-	-	-	-	600	-	-
2.5	$\leq 10$ m	1.0	3.89	1650	1550	1400	1800	1800	1650	1650	1550	1400	1800	1700	1450
		1.5	5.16	1350	1250	1150	1550	1350	1150	1350	1250	1100	1400	1250	1100
		2.0	6.42	1150	1050	950	1150	1100	1050	1100	1050	900	1100	1050	900
		3.0	7.20	1050	950	800	1100	1050	950	1000	900	700	1000	900	750
3&4	$\leq 5$ m	1.0	3.54	1700	1650	1500	1800	1800	1800	1700	1650	1500	1800	1800	1650
		1.5	4.69	1450	1350	1250	1700	1550	1300	1450	1350	1200	1550	1400	1200
		2.0	5.84	1250	1150	1050	1300	1150	1100	1200	1100	1000	1250	1100	1000
		3.0	6.55	1150	1050	950	1150	1100	1050	1100	1000	850	1100	1000	850

**Product name**  
**STRAMIT LONGSPAN® ROOFING**

**Product Description**  
 Stramit Longspan® is manufactured from G550 colour coated or zinc-aluminium / zinc-aluminium-magnesium alloy coated steel. In some locations galvanised (Z450) may also be available.

**Manufacturer's Name**  
**Stramit Building Products**  
 55 Albatros Street, Winnelle, NT 0820

**Design Criteria**  
 Spans are based on the combinations of the following factors, for Region C, in accordance with AS/NZS 1170.2:2011 (inc Amendment No2)

Strength: Regional wind speed  $V_{500} = 69$ m/s  
 Serviceability: Regional wind speed  $V_{25} = 47$ m/s  
 Terrain / Height Multiplier ( $M_{z,cat}$ ): as per table 4.1 in AS/NZS1170 2:2011

TC	'h' up to 5m	'h' up to 10m
1&2	1.05	1.12
2.5	0.87	0.92
3&4	0.83	0.83

Wind direction multiplier:  $M_d = 1.0$   
 Shielding multiplier:  $M_s = 1.0$   
 Topographic multiplier:  $M_t = 1.0$   
 Dynamic response factor:  $C_{dyn} = 1.0$   
 Combination factor:  $K_c = 0.9$   
 Internal pressure coefficient:  $C_{p,i} = +0.2$  service  
 External pressure coefficient:  $C_{p,e} = +0.7$  strength

$C_{p,e} = -0.9$  for  $h/d \leq 0.5$ , and for horizontal distance from windward edge of the roof up to 'h'  
 $C_{p,e} = -1.3$  for  $h/d \geq 1.0$ , and for horizontal distance from windward edge of the roof up to '0.5h'

TC - Terrain category, h - Average roof height, d - Building length or depth, and local pressure factors as defined in AS/NZS1170.2.  
 Test factor  $k_1 = 1.21$  in accordance with Table B1 of AS/NZS1170.0.

- Limitations:**
- INTERNAL SPANS SHALL HAVE BOTH END SPANS 20% SHORTER THAN THE VALUES IN THE SPAN CONFIGURATION TABLES.
  - This DTC sheet is for roof applications only.
  - Foot traffic limitations as indicated.
  - The maximum roof pitch is: 25°
  - The maximum permissible free edge overhang is: 150mm from screwline.
  - The maximum permissible stiffened edge overhang is: 350mm from screwline.
  - When using cyclonic steel battens, the maximum batten spacing may be critical and limit the span of the cladding. It is essential that this sheet is read in conjunction with the relevant deemed to comply information for the batten product adopted.

Accepted for Inclusion

DTCM ref: M/178/01

Chairman's Signature:

Chairman's Name: STEVEN J BURCHILL

Date of Approval: 22 OCT 2015  
 Expiry Date: 21 OCT 2020

**Notes covering the basis of DTC (Relevant test reports, etc.)**

- Tables are based on an extensive LHL test program (Test Report No.s TS677, TS702, TS715 & TS721) carried out by James Cook University Cyclone Testing Station in accordance with BCA 2009.
- For information on durability, slope and other details and limitations please refer to the Stramit Longspan® Product Technical Manual or the Stramit® Roof Slope Guide.
- Tabulated values may be interpolated but not extrapolated.
- For other values of 'h', spans can be determined using the limit state capacity tables on the left.

**\*Design Engineer's Certification**  
 Name: Yuri Arguedas  
 Registration Number: 845724  
 Date: 7/05/2015  
 Signature:   
 \*registered as a structural engineer in Australia

**\*\*Certifying Engineer's Certification**  
 Name: Adam James  
 Registration Number: 26968ES  
 Date: 07/10/2015  
 Signature:   
 \*\*registered as a structural engineer in Northern Territory