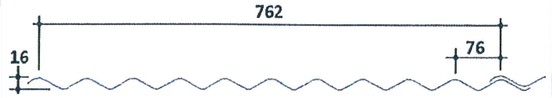
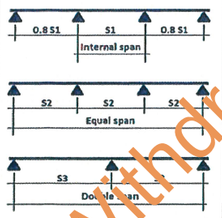
IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1), THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENT P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.

Profile



Fasteners locations

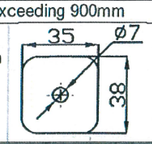
Span configurations



STRAMIT® CORRUGATED RECOMMENDED FASTENINGS (CYCLONIC FIXING)	
STEEL 0.75mm thick	No 14 - 10 x 40mm Hex Head Type 17 screw + sealing washer + caps
STEEL ≥ 1.5mm thick	No 14 - 10 x 40mm Hex Head Self-drilling and tapping screw + sealing washer + caps
HARDWOOD (F11/J2/JD2 or stronger)	No 14 - 10 x 50mm Hex Head Type 17 screw + sealing washer + caps
SOFTWOOD (F7/F8/J4/JD4 or stronger)	No 14 - 10 x 65mm 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 38mm 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.



Pressures

STRAMIT® CORRUGATED CLADDING - STRENGTH LIMIT STATE CAPACITY (CYCLONIC)

pressure (kPa) at the spans (mm) shown

Timber Batten/Steel ≥1.5mm

BMT (mm)	fasteners per sheet	span-type	Roof Sheeting (Crest fixed) 450	600	900	1200	1500	1800
0.42	5 with cyclone caps	internal	11.55	10.64	8.30	6.67	4.63	3.18
		equal	9.59	8.76	6.03	4.38		
		double	8.44	7.71	5.31	3.85		
0.48	5 with cyclone caps	internal	11.55	10.45	8.30	6.67	4.63	3.18
		equal	9.59	9.50	7.55	5.79	4.25	2.89
		double	8.44	8.36	6.64	5.10	3.74	2.54
0.60	5 with cyclone caps	internal	10.55	9.64	7.59	4.80		
		equal	9.59	8.76	5.99	4.36		
		double	8.44	7.71	5.27	3.84		

STRAMIT® CORRUGATED CLADDING - STRENGTH LIMIT STATE CAPACITY (CYCLONIC)

pressure (kPa) at the spans (mm) shown

0.75mm Cyclonic Steel Battens

BMT (mm)	fasteners per sheet	span-type	Roof Sheeting (Crest fixed) 450	600	900	1200	1500	1800
0.42	5 with cyclone caps	internal	10.55	9.64	6.63	4.80		
		equal	9.59	8.76	5.99	4.38		
		double	8.44	7.71	5.31	3.85		
0.48	5 with cyclone caps	internal	10.55	10.45	7.55	5.59	4.47	3.18
		equal	9.59	9.50	6.77	5.08	4.06	2.89
		double	8.44	8.36	5.96	4.47	3.57	2.54
0.60	5 with cyclone caps	internal	10.55	9.64	6.59	4.80		
		equal	9.59	8.76	5.99	4.36		
		double	8.44	7.71	5.27	3.84		

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

Span tables

STRAMIT® CORRUGATED CLADDING MAXIMUM SPAN CHART (mm)

$C_{p,e}$ = -0.9 (h/d ≤ 0.5)

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

TC	h	local press. factor	pressure (kPa)	Timber Battens / Steel 1.5mm: 0.42mm thick (bmt)			0.48mm thick (bmt)			0.6mm thick (bmt)			0.75mm Cyclonic Steel Battens: 0.42mm thick (bmt)			0.48mm thick (bmt)			0.6mm thick (bmt)		
			Strength	internal	equal	double	internal	equal	double	internal	equal	double	internal	equal	double	internal	equal	double	internal	equal	double
1&2	≤ 10m	1.0	5.16	1100	900	900	1400	1200	1150	1100	900	900	1100	900	900	1300	1150	1050	1100	900	900
		1.5	6.61	900	800	700	1150	1050	900	850	800	700	900	800	700	1000	900	800	850	800	700
		2.0	8.06	750	650	500	900	800	650	750	650	500	750	650	500	800	750	600	750	650	500
		3.0	10.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1&2 2.5	≤ 5m ≤ 10m	1.0	4.54	1200	900	900	1500	1200	1200	1200	900	900	1200	900	900	1450	1200	1150	1200	900	900
		1.5	5.81	1000	900	800	1250	1150	1050	1000	900	800	1000	900	800	1150	1050	900	1000	900	800
		2.0	7.09	850	750	650	1050	950	800	850	750	650	850	750	650	950	850	750	850	750	650
		3.0	9.64	600	-	-	700	-	-	600	-	-	600	-	-	650	-	-	600	-	-
2.5 3&4	≤ 5m ≤ 10m	1.0	3.11	1200	900	900	1600	1200	1200	1200	900	900	1200	900	900	1600	1200	1200	1200	900	900
		1.5	3.99	1200	900	900	1600	1200	1200	1200	900	900	1200	900	900	1600	1200	1200	1200	900	900
		2.0	4.87	1150	900	900	1450	1200	1200	1150	900	900	1150	900	900	1350	1200	1100	1150	900	900
		3.0	6.62	900	800	700	1150	1050	900	850	800	700	900	800	700	1000	900	800	850	800	700
3&4	≤ 5m	1.0	2.83	1200	900	900	1600	1200	1200	1200	900	900	1200	900	900	1600	1200	1200	1200	900	900
		1.5	3.63	1200	900	900	1600	1200	1200	1200	900	900	1200	900	900	1600	1200	1200	1200	900	900
		2.0	4.43	1200	900	900	1550	1200	1200	1200	900	900	1200	900	900	1500	1200	1200	1200	900	900
		3.0	6.02	1000	900	800	1250	1150	1000	950	850	800	1000	900	800	1100	1000	850	950	850	800

STRAMIT® CORRUGATED CLADDING MAXIMUM SPAN CHART (mm)

$C_{p,e}$ = -1.3 (h/d ≥ 1.0)

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

TC	h	local press. factor	pressure (kPa)	Timber Battens / Steel 1.5mm: 0.42mm thick (bmt)			0.48mm thick (bmt)			0.6mm thick (bmt)			0.75mm Cyclonic Steel Battens: 0.42mm thick (bmt)			0.48mm thick (bmt)			0.6mm thick (bmt)		
			Strength	internal	equal	double	internal	equal	double	internal	equal	double	internal	equal	double	internal	equal	double	internal	equal	double
1&2	≤ 10m	1.0	6.45	900	850	750	1150	1050	900	900	850	750	900	850	750	1050	950	800	900	850	750
		1.5	8.55	700	600	-	850	700	-	700	600	-	700	600	-	750	700	-	700	600	-
		2.0	10.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3.0	11.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1&2 2.5	≤ 5m ≤ 10m	1.0	5.67	1050	900	850	1300	1200	1050	1050	900	850	1050	900	850	1150	1050	950	1050	900	850
		1.5	7.51	800	700	600	1000	900	700	800	700	600	800	700	600	850	800	700	800	700	600
		2.0	9.35	600	450	-	750	600	-	600	450	-	600	450	-	700	600	-	600	450	-
		3.0	10.49	450	-	-	500	-	-	450	-	-	450	-	-	500	-	-	450	-	-
2.5 3&4	≤ 5m ≤ 10m	1.0	3.89	1200	900	900	1600	1200	1200	1200	900	900	1200	900	900	1600	1200	1200	1200	900	900
		1.5	5.16	1100	900	900	1400	1200	1150	1100	900	900	1100	900	900	1300	1150	1050	1100	900	900
		2.0	6.42	900	850	750	1150	1050	900	900	850	750	900	850	750	1050	950	800	900	850	750
		3.0	7.20	800	750	650	1050	950	800	800	750	650	800	750	650	900	850	700	800	750	650
3&4	≤ 5m	1.0	3.54	1200	900	900	1600	1200	1200	1200	900	900	1200	900	900	1600	1200	1200	1200	900	900
		1.5	4.69	1200	900	900	1450	1200	1200	1200	900	900	1200	900	900	1400	1200	1150	1200	900	900
		2.0	5.85	1000	900	800	1250	1150	1050	1000	900	800	1000	900	800	1150	1050	900	1000	900	800
		3.0	6.55	900	800	700	1150	1050	900	900	800	700	900	800	700	1000	900	800	900	800	700

Notes covering basis of DTC (Relevant test reports etc)

- Tables are based on an extensive LHL test program (Test Report No.s TS661, TS687, TS700 , TS711 & TS724) 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® Corrugated Product Technical Manual and 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/OCT/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*

Product name

STRAMIT® CORRUGATED ROOFING

Product Description

Stramit® Corrugated cladding is manufactured from G550 (for 0.42 & 0.48mm BMT product) and G300 (for 0.6mm BMT product) colour coated steel or zinc-aluminium/zinc-aluminium-magnesium alloy coated steel. In some locations galvanised (Z450) steel may also be available.

Manufacturer's Name
Stramit Building Products
55 Albatros Street, Winnelie, 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} = 69m/s

Serviceability: Regional wind speed V_{25} = 47m/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
Internal pressure coefficient:	$C_{p,i}$ =	+0.7	strength

External pressure coefficients :

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

$C_{p,e}$ = -1.3 for h/d ≥ 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_t = 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: 100mm from screwline.
- The maximum permissible stiffened edge overhang is: 200mm 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/177/01

Chairman's Signature:

Chairman's Name: STEVEN J EHRLICH

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