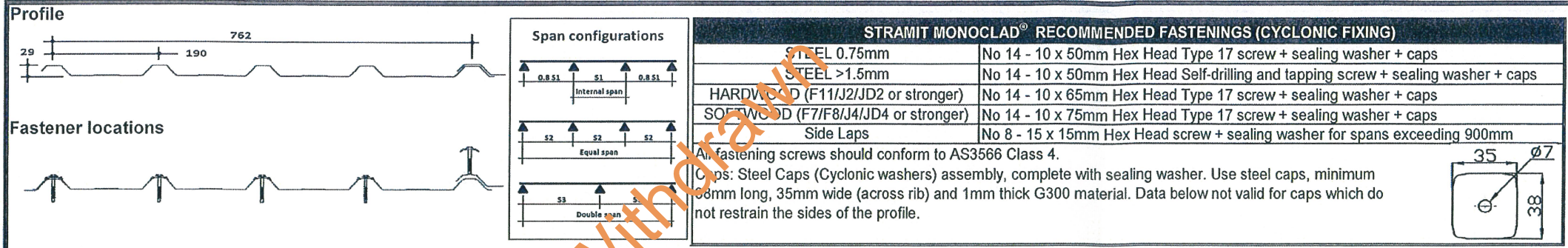


IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1). THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENT P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA



**Product name**  
**STRAMIT MONOCLAD® ROOFING**

**Product Description**  
Stramit MonoClad® is manufactured from G550 colour coated steel 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, Winnelie, NT 0820

**Pressures**

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

Timber Batten/Steel >1.5mm	BMT fasteners per sheet	span-type	Roof Sheeting (Crest fixed)						
			450	600	900	1200	1500	1800	
0.42	4 with cyclone caps	internal	8.64	8.15	7.27	5.69	3.85	2.17	
		equal	7.85	7.41	6.6	5.18	3.50	1.97	
	double	internal	6.91	6.52	5.82	4.55	3.08	1.73	
		equal	10.00	10.00	10.00	7.60	5.36	4.37	
	0.48	4 with cyclone caps	internal	9.09	8.99	9.09	6.91	5.37	3.97
			double	8.00	8.00	8.00	6.08	4.69	3.49

**Span tables**

**STRAMIT MONOCLAD® CLADDING - MAXIMUM SPAN CHART (mm)**  
Crest fixed roof sheeting - four fasteners per sheet with cyclone caps  
 $C_{p,e} = -0.9$  ( $h/d \leq 0.5$ )

TC	h	local press. factor	pressure (kPa)	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)		
				Strength	internal	equal	double	internal	equal	double	internal	equal	double	internal	equal
1&2	≤ 10m	1.0	5.16	1250	1200	1050	1600	1500	1350	1050	950	800	1050	950	850
		1.5	6.61	1000	900	550	1350	1250	1100	800	700	550	800	750	650
		2.0	8.06	600	-	-	1100	1000	-	600	-	-	650	600	-
		3.0	10.97	-	-	-	-	-	-	-	-	-	-	-	-
1&2	≤ 5m	1.0	4.54	1350	1300	1200	1750	1650	1500	1150	1050	950	1150	1050	950
		1.5	5.81	1150	1050	900	1500	1400	1250	900	800	700	900	850	750
		2.0	7.09	900	700	-	1250	1150	1000	700	600	-	750	700	600
		3.0	9.64	-	-	-	900	-	-	-	-	-	500	-	-
2.5	≤ 10m	1.0	3.11	1600	1350	1350	1800	1700	1700	1550	1350	1350	1700	1550	1350
		1.5	3.99	1450	1350	1300	1800	1700	1650	1350	1200	1050	1350	1200	1050
		2.0	4.87	1300	1250	1100	1700	1600	1450	1100	1000	850	1100	1000	850
		3.0	6.62	1000	850	550	1350	1250	1100	800	700	550	800	750	650
3&4	≤ 10m	1.0	2.83	1650	1350	1350	1800	1700	1700	1650	1350	1350	1800	1700	1500
		1.5	3.63	1500	1350	1350	1800	1700	1700	1450	1350	1150	1450	1350	1150
		2.0	4.43	1400	1300	1200	1750	1650	1550	1200	1100	950	1200	1100	950
		3.0	6.02	1100	1000	800	1450	1350	1200	850	800	650	850	800	700

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

0.75mm Cyclonic Steel Battens	BMT fasteners per sheet	span-type	Roof Sheeting (Crest fixed)						
			450	600	900	1200	1500	1800	
0.42	4 with cyclone caps	internal	8.64	8.15	5.96	4.47	3.57	2.17	
		equal	7.85	7.41	5.42	4.06	3.25	1.97	
	double	internal	6.91	6.52	4.77	3.57	2.86	1.73	
		equal	10.00	8.94	5.96	4.47	3.57	2.98	
	0.48	4 with cyclone caps	internal	9.09	8.13	5.42	4.06	3.25	2.71
			double	8.00	7.15	4.77	3.57	2.86	2.38

**STRAMIT MONOCLAD® CLADDING - MAXIMUM SPAN CHART (mm)**  
Crest fixed roof sheeting - four fasteners per sheet with cyclone caps  
 $C_{p,e} = -1.3$  ( $h/d \geq 1.0$ )

TC	h	local press. factor	pressure (kPa)	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)		
				Strength	internal	equal	double	internal	equal	double	internal	equal	double	internal	equal
1&2	≤ 10m	1.0	6.45	1050	900	600	1350	1250	1100	800	700	600	850	750	650
		1.5	8.55	450	-	-	1050	950	-	450	-	-	600	500	-
		2.0	10.64	-	-	-	-	-	-	-	-	-	-	-	-
		3.0	11.93	-	-	-	-	-	-	-	-	-	-	-	-
1&2	≤ 5m	1.0	5.67	1200	1050	900	1500	1400	1250	950	850	700	950	850	750
		1.5	7.51	800	550	-	1200	1100	950	650	550	-	700	650	500
		2.0	9.35	-	-	-	950	-	-	-	-	-	500	-	-
		3.0	10.49	-	-	-	-	-	-	-	-	-	-	-	-
2.5	≤ 10m	1.0	3.89	1450	1350	1300	1800	1700	1700	1350	1250	1100	1350	1250	1100
		1.5	5.16	1250	1200	1050	1600	1500	1350	1050	950	800	1050	950	850
		2.0	6.42	1050	900	600	1400	1250	1100	800	700	600	850	750	650
		3.0	7.20	900	650	-	1250	1150	1000	700	600	-	750	700	550
3&4	≤ 5m	1.0	3.54	1550	1350	1350	1800	1700	1700	1500	1350	1200	1500	1350	1200
		1.5	4.69	1350	1250	1150	1700	1600	1500	1150	1050	900	1150	1050	900
		2.0	5.85	1150	1050	850	1500	1400	1250	900	800	700	900	850	750
		3.0	6.55	1000	900	550	1350	1250	1100	800	700	550	800	750	650

**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  $h/d \leq 0.5$ , 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: 100mm from screwline.
- The maximum permissible stiffened edge overhang is: 300mm 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/179/01

Chairman's Signature:

Chairman's Name: STEVEN J EURLICH

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

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

- Tables are based on an extensive LHL test program (Test Report No.s TS662, TS688, TS701, TS714 & TS720) 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 MonoClad® 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: 7/08/2015  
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*