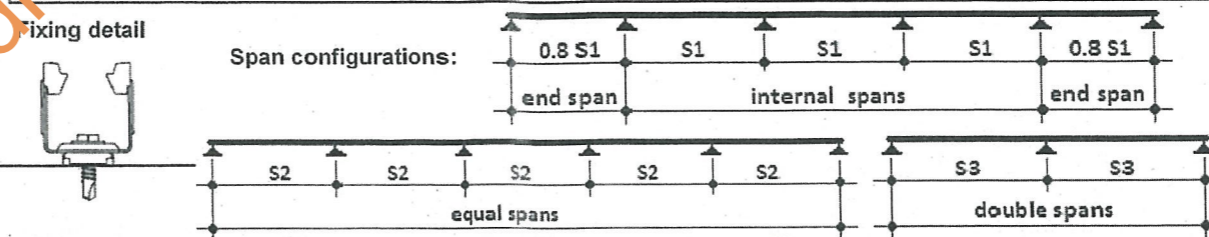


STRAMIT SPEED DECK ULTRA® RECOMMENDED FASTENINGS	
CLIP	Stramit Speed Deck Ultra® clip
STEEL 0.75mm thick	No 14-10 x 25mm Hex Head Type 17 screw + sealing washer
STEEL ≥ 1.5mm thick	No 12 x 30mm Hex Head screw + sealing washer
HARDWOOD (F11/J2/JD2 or stronger)	No 12 x 50mm Hex Head Type 17 screw + sealing washer
SOFTWOOD (F7/F8/J4/JD4 or stronger)	No 14 - 10 x 75mm Hex Head Type 17 screw + sealing washer

All fastening screws should conform to AS3566- class 3 or above.



Product name  
**STRAMIT SPEED DECK ULTRA® Roofing**

Product Description  
Stramit Speed Deck Ultra® roof cladding is manufactured from 0.42 & 0.48mm BMT G550 colour coated steel or zinc-aluminium alloy coated (AZ150) steel.

Design Criteria  
Spans are based on the combinations of the following factors, for Region C, in accordance with AS1170.2:-  
Strength: Regional wind speed  $V_{500} = 69\text{m/s}$   
Serviceability: Regional wind speed  $V_{25} = 47\text{m/s}$   
Terrain / Height Multiplier ( $M_{z,cat}$ ):

TC	'h' up to 5m		'h' up to 10m	
	serviceability	strength	serviceability	strength
1&2	1.05	0.95	1.12	1.00
2.5	0.87	0.88	0.92	0.95
3&4	0.83	0.80	0.83	0.89

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

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 AS1170.2  
Test factor  $k_t = 1.21$  in accordance with Table B1 of AS1170.0.

Limitations:  
- INTERNAL SPANS SHOULD HAVE BOTH END SPANS 20% SHORTER THAN THE TABULATED VALUES  
- This DTC sheet is for roof applications only.  
- Foot traffic limitations as indicated.  
- The maximum roof pitch is: 25°  
- For Region C, suburban area, with shielding, the maximum overhang for 0.42 BMT with a free edge is 150mm & a stiffened edge is 450mm. The maximum overhang for 0.48 BMT with a free edge is 200mm & a stiffened edge is 450mm.  
- For Region C, suburban area, no shielding, the maximum overhang for 0.42 BMT with a free edge is 100mm & a stiffened edge is 250mm. The maximum overhang for 0.48 BMT with a free edge is 150mm & a stiffened edge is 350mm  
- Sheeting span can be limited by maximum batten spacing when using cyclonic steel battens. See Drawing No M/652/01 for information on Stramit Cyclonic Roof Battens.

Accepted for Inclusion  
DTCM ref: M-170-1

Chairman's Signature: [Signature]  
Chairman's Name: Mr Steven J EURLICH  
Date of Approval: 28-7-11  
Expiry Date: 28-7-2014

STRAMIT SPEED DECK ULTRA® CLADDING - SERVICEABILITY LIMIT STATE CAPACITY (CYCLONIC)								
pressure (kPa) at the spans (mm) shown								
BMT (mm)	fasteners per sheet	span-type	Roof Sheeting (Clip fixed)					
			450	600	900	1200	1500	1800
0.42	1 clip & 3 screws	internal	3.78	3.09	2.81	2.53	2.24	1.96
		equal	3.44	3.25	2.86	2.47	2.08	1.68
		double	2.69	2.57	2.23	2.08	1.84	1.60
0.48	1 clip & 3 screws	internal	3.59	3.43	3.12	2.80	2.49	2.18
		equal	3.82	3.60	3.17	2.74	2.30	1.87
		double	2.98	2.85	2.58	2.31	2.04	1.78

STRAMIT SPEED DECK ULTRA® CLADDING - STRENGTH LIMIT STATE CAPACITY (CYCLONIC)								
pressure (kPa) at the spans (mm) shown								
BMT (mm)	fasteners per sheet	span-type	Roof Sheeting (Clip fixed)					
			450	600	900	1200	1500	1800
0.42	1 clip & 3 screws	internal	10.69	9.11	7.52	5.76	4.43	2.98
		equal	9.72	8.28	6.84	5.24	4.03	2.71
		double	8.55	7.29	6.02	4.61	3.55	2.38
0.48	1 clip & 3 screws	internal	10.69	9.50	7.92	5.54	4.25	3.36
		equal	9.72	8.64	7.20	5.04	3.87	3.05
		double	8.55	7.60	6.34	4.44	3.40	2.68

STRAMIT SPEED DECK ULTRA® CLADDING - STRENGTH LIMIT STATE CAPACITY (CYCLONIC)								
pressure (kPa) at the spans (mm) shown								
BMT (mm)	fasteners per sheet	span-type	Roof Sheeting (Clip fixed)					
			450	600	900	1200	1500	1800
0.42	1 clip & 3 screws	internal	9.71	7.29	4.86	3.64	2.91	2.43
		equal	8.83	6.62	4.42	3.31	2.65	2.21
		double	7.77	5.83	3.89	2.91	2.33	1.94
0.48	1 clip & 3 screws	internal	9.71	7.29	4.86	3.64	2.91	2.43
		equal	8.83	6.62	4.42	3.31	2.65	2.21
		double	7.77	5.83	3.89	2.91	2.33	1.94

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

STRAMIT SPEED DECK ULTRA® CLADDING MAXIMUM SPAN CHART (mm)															
$C_{p,e} = -0.9$ ( $h/d \leq 0.5$ )															
Concealed fixed roof sheeting - 1 Clip & three fasteners per sheet															
TC	h	local press. factor	pressure (kPa) strength	Timber Batten/Steel 1.5mm			0.75mm Cyclonic Steel Battens								
				0.42mm thick (bmt)	0.48mm thick (bmt)	0.42mm thick (bmt)	0.48mm thick (bmt)	0.42mm thick (bmt)	0.48mm thick (bmt)	0.42mm thick (bmt)	0.48mm thick (bmt)				
1&2	≤ 10m	1.0	4.57	1450	1350	1200	1400	1300	1150	950	850	750	950	850	750
		1.5	5.86	1150	1050	900	1150	1050	950	750	700	550	750	700	550
		2.0	7.14	950	800	600	950	900	700	600	550	450	600	550	450
1&2	≤ 5m	1.0	4.12	1550	1450	1300	1500	1400	1250	1050	950	850	1050	950	850
		1.5	5.29	1300	1150	1050	1250	1150	1050	800	750	650	800	750	650
		2.0	6.45	1050	950	750	1050	1000	850	700	600	550	700	600	550
2.5	≤ 10m	1.0	3.62	1650	1550	1450	1700	1550	1400	1200	1100	950	1200	1100	950
		1.5	4.64	1450	1350	1150	1400	1300	1150	950	850	750	950	850	750
		2.0	5.66	1200	1100	950	1150	1100	1000	800	700	600	800	700	600
3&4	≤ 10m	1.0	2.93	1800	1750	1650	1800	1800	1650	1450	1350	1150	1450	1350	1150
		1.5	3.75	1600	1550	1400	1650	1500	1350	1150	1050	900	1150	1050	900
		2.0	4.57	1450	1350	1200	1400	1300	1150	950	850	750	950	850	750
3&4	≤ 5m	1.0	2.93	1800	1750	1650	1800	1800	1650	1450	1350	1150	1450	1350	1150
		1.5	3.75	1600	1550	1400	1650	1500	1350	1150	1050	900	1150	1050	900
		2.0	4.57	1450	1350	1200	1400	1300	1150	950	850	750	950	850	750

STRAMIT SPEED DECK ULTRA® CLADDING MAXIMUM SPAN CHART (mm)															
$C_{p,e} = -1.3$ ( $h/d \geq 1.0$ )															
Concealed fixed roof sheeting - 1 Clip & three fasteners per sheet															
TC	h	local press. factor	pressure (kPa) strength	Timber Batten/Steel 1.5mm			0.75mm Cyclonic Steel Battens								
				0.42mm thick (bmt)	0.48mm thick (bmt)	0.42mm thick (bmt)	0.48mm thick (bmt)	0.42mm thick (bmt)	0.48mm thick (bmt)	0.42mm thick (bmt)	0.48mm thick (bmt)				
1&2	≤ 10m	1.0	5.71	1200	1100	950	1150	1100	950	750	700	600	750	700	600
		1.5	7.57	850	700	550	900	800	600	550	500	450	550	500	450
		2.0	9.43	550	450	-	600	450	-	450	-	-	450	-	-
1&2	≤ 5m	1.0	5.16	1300	1200	1050	1250	1150	1050	850	750	700	850	750	700
		1.5	6.83	1000	900	700	1000	950	750	650	550	500	650	550	500
		2.0	8.51	700	550	450	750	600	450	500	450	-	500	450	-
2.5	≤ 10m	1.0	4.53	1450	1350	1200	1400	1300	1150	950	850	800	950	850	800
		1.5	6.00	1150	1050	900	1100	1050	950	750	650	550	750	650	550
		2.0	7.47	900	750	550	950	800	600	550	500	450	550	500	450
3&4	≤ 10m	1.0	3.66	1650	1550	1450	1650	1550	1400	1150	1100	950	1150	1100	950
		1.5	4.84	1400	1300	1150	1350	1250	1100	900	800	750	900	800	750
		2.0	6.03	1150	1050	850	1100	1050	900	750	650	550	750	650	550

Note  
- Tables are based on an extensive LHL test program carried out by ENGTEST (Test Report No C100203) at the University of Adelaide and by James Cook University Cyclone Testing Station (Test Report No. TS717) in accordance with BCA 2009.  
- For information on durability, slope and other details and limitations please refer to the Stramit Speed Deck Ultra® 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: A. Stancombe  
Registration Number: 490310  
Date: 4/5/2011  
Signature: [Signature]  
\*registered as a structural engineer in Australia

\*Certifying Engineer's Certification  
Name: Townes Chappell Mudgway P/L  
Registration Number: 12611ES  
Date: [Signature]  
Signature: [Signature]  
\*registered as a structural engineer in Northern Territory

New Expiry: 28/1/2015  
Signature: [Signature]