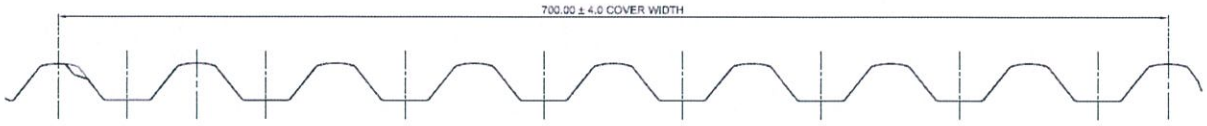
SPANDEK

TEST REPORT SUMMARY

PIC/RW/R/296/05/0

Profile:



Spandek profile

1. Limit State Load capacity for Spandek is provided for 0.42 & 0.48 BMT (G550).
2. Spandek is fastened using 3 or 4 screws per sheet to the support using #12-14x55 wafer head self-drilling screws with washer (or higher specification).
3. The capacity tables are based on testing carried out at Lysaght's NATA registered testing laboratory by using the direct pressure testing rig.
4. Testing was carried out in accordance to the following Australian Standards:
   a. AS 1562-1992 – Design and Installation of sheet roof and wall cladding-Part 1: Metal
   b. AS 4040.0-1992 – Methods for testing sheet roof and wall cladding-Part 0: Introduction, list of methods and general requirements
   c. AS 4040.1-1992 – Methods for testing sheet roof and wall cladding - Method 1: Resistance to concentrated loads
   d. AS 4040.2-1992 – Methods for testing sheet roof and wall cladding - Method 2: Resistance to wind pressure for non-cyclone regions

LYSAGHT SPANDEK: Limit State wind pressure capacities (kPa)

Span type	Fasteners per sheet per support		Span (mm) 900	1200	1500	1800	2100	2400	2700	3000	3300
Base metal thickness 0.42 mm											
SINGLE	3	Serviceability	2.04	1.64	1.27	0.96	0.72	0.54	0.41	0.30	–
		Strength	8.35	6.85	5.45	4.30	3.50	2.95	2.60	2.30	–
	4	Serviceability	4.24	3.07	2.02	1.20	0.68	0.42	0.33	0.30	–
		Strength	10.25	8.35	6.60	5.20	4.25	3.70	3.40	3.20	–
END	3	Serviceability	2.05	1.82	1.61	1.40	1.20	1.02	0.83	0.65	–
		Strength	5.85	4.40	3.20	2.35	1.85	1.55	1.45	1.40	–
	4	Serviceability	3.75	3.19	2.67	2.20	1.78	1.40	1.05	0.72	–
		Strength	6.90	5.65	4.55	3.75	3.15	2.70	2.40	2.20	–
INTERNAL	3	Serviceability	1.96	1.81	1.66	1.52	1.37	1.23	1.08	0.93	0.79
		Strength	6.90	5.80	4.70	3.70	2.85	2.25	1.80	1.60	1.50
	4	Serviceability	4.74	4.05	3.38	2.75	2.20	1.73	1.36	1.08	0.87
		Strength	8.55	6.80	5.40	4.35	3.55	2.95	2.55	2.30	2.20
Base metal thickness 0.48 mm											
SINGLE	3	Serviceability	2.50	2.08	1.69	1.34	1.04	0.79	0.58	0.38	–
		Strength	9.00	7.55	6.25	5.10	4.25	3.60	3.10	2.70	–
	4	Serviceability	5.07	3.53	2.35	1.48	1.00	0.70	0.52	0.40	–
		Strength	12.00	10.35	8.30	6.65	5.40	4.60	4.00	3.60	–
END	3	Serviceability	3.05	2.58	2.15	1.78	1.47	1.20	0.96	0.75	–
		Strength	7.55	5.65	4.05	3.35	2.85	2.50	2.25	2.10	–
	4	Serviceability	5.34	4.37	3.50	2.76	2.16	1.65	1.22	0.83	–
		Strength	9.75	7.65	5.85	4.50	3.70	3.20	2.95	2.85	–
INTERNAL	3	Serviceability	2.72	2.40	2.09	1.79	1.53	1.30	1.10	0.95	0.82
		Strength	9.00	7.05	5.50	4.30	3.40	2.75	2.35	2.10	2.00
	4	Serviceability	6.50	5.44	4.43	3.49	2.66	1.99	1.49	1.14	0.90
		Strength	11.40	9.70	8.05	6.55	5.25	4.20	3.50	3.05	2.80

1. Strength limit state pressure capacities have been determined by testing the cladding to failure. A capacity reduction factor of 0.9 is applied to derive the design capacity in the table above.
2. Serviceability limit state pressure capacities are based on a deflection limit of (span/120) + (maximum fastener pitch/30).

Maximum support spacings (mm)

Type of span	0.42 BMT	0.48
Roofs		
Single span	1300	2000
End span	1800	2200
Internal span	2400	3000
Unstiffened eaves overhang	300	400
Stiffened eaves overhang	600	700
Walls		
Single span	2500	3000
End span	3000	3000
Internal span	3300	3300
Overhang	300	400

1. The maximum recommended support spacings are based on testing.
2. Roof spans consider both resistance to wind pressure and light roof traffic (traffic arising from incidental maintenance).

note: further details refer to Lysaght Spandek Brochure.

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