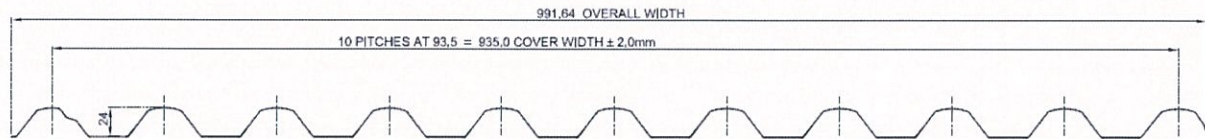


Profile:



Spandek Optima profile

1. Limit State Load capacity for Spandek Optima is provided for 0.30, 0.42 & 0.48 BMT (G550).
2. Spandek Optima is fastened using 5 screws per sheet to the support at every 2nd rib 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® OPTIMA™: LIMIT STATE WIND PRESSURE CAPACITIES (kPa)

LYSAGHT® SPANDEK® OPTIMA™ 0.42mm BMT / 0.47mm TCT											
		For roofs (c/c) Span (mm)									
Span Type	Fasteners per sheet per support		900	1200	1500	1800	2100	2400	2700	3000 3300	
Single	5	Serviceability	3.46	2.67	1.94	1.29	0.80	0.48	0.32	0.24	
		Strength*	10.85	8.70	6.70	4.98	3.68	2.92	2.58	2.53	-
End	5	Serviceability	3.12	2.71	2.31	1.93	1.58	1.27	0.99	0.74	-
		Strength*	7.94	6.46	5.08	3.88	2.95	2.36	2.04	1.92	-
Internal	5	Serviceability	3.47	2.99	2.54	2.13	1.76	1.46	1.21	0.99	0.79
		Strength*	9.09	7.53	6.08	4.79	3.78	3.11	2.69	2.48	2.34

LYSAGHT® SPANDEK® OPTIMA™ 0.48mm BMT / 0.53mm TCT											
		For roofs (c/c) Span (mm)									
Span Type	Fasteners per sheet per support		900	1200	1500	1800	2100	2400	2700	3000 3300	
Single	5	Serviceability	3.97	3.07	2.21	1.42	0.91	0.55	0.35	0.27	0.24
		Strength*	11.07	9.53	8.06	6.72	5.57	4.65	3.93	3.33	2.80
End	5	Serviceability	4.11	3.49	2.89	2.34	1.85	1.44	1.09	0.79	0.52
		Strength*	9.00	7.42	5.93	4.64	3.64	2.99	2.63	2.46	2.39
Internal	5	Serviceability	4.28	3.59	2.93	2.33	1.83	1.44	1.15	0.93	0.73
		Strength*	10.28	8.49	6.80	5.32	4.15	3.36	2.87	2.54	2.41

* A capacity reduction factor of 0.9 is applied to strength capacities.
These capacities are based on tests conducted at BlueScope Steel's NATA registered testing laboratory using a direct pressure testing rig.
Supports must not be less than 1mm BMT.

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

LYSAGHT® SPANDEK® OPTIMA™		
Type of span		
Base Metal Thickness (mm)	0.42	0.48
Total Coating Thickness (mm)	0.47	0.53
Roof (mm)		
Single Span	1500	2200
End Span	2100	2400
Internal Span	2300	3300
Unstiffened Overhang	200	250
Stiffened Overhang	450	500
Walls (mm)		
Single Span	2200	2300
End Span	3100	3200
Internal Span	3300	3300
Overhang	150	150

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 Optima Brochure.*

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