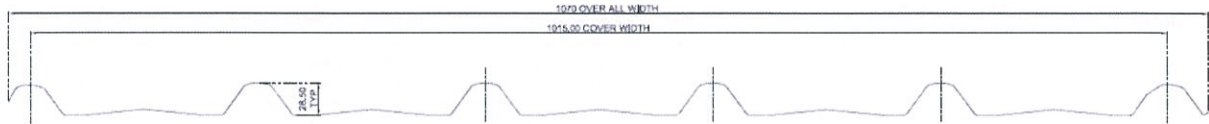


Profile:



Trimdek Optima profile

1. Limit State Load capacity for Trimdek Optima is provided for 0.30, 0.35, 0.42 & 0.48 BMT (G550).
2. Trimdek Optima is fastened using 5 screws per sheet to the support at every 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



TRIMDEK OPTIMA

TEST REPORT SUMMARY

PIC/RW/R/296/03/0

LYSAGHT TRIMDEK OPTIMA®: Limit state wind pressure capacities (kPa)

TRIMDEK OPTIMA 0.3mm BMT												
Span Type	Fastener per sheet per support		600	900	1200	1500	1800	2100	2400	2700	3000	3300
Single	5	Serviceability Strength *	1.42 7.14	1.21 5.99	0.99 4.91	0.79 3.90	0.62 3.02	0.47 2.31	0.35 1.81	0.27 1.48	0.19 1.24	
End	5	Serviceability Strength *	1.61 6.41	1.43 5.19	1.25 4.03	1.08 3.00	0.91 2.14	0.76 1.53	0.62 1.46	0.49 1.39	0.36 1.31	
Internal	5	Serviceability Strength *	1.33 7.76	1.24 6.23	1.15 4.78	1.06 3.47	0.96 2.40	0.85 1.64	0.74 1.56	0.61 1.49	0.49 1.40	0.36 1.32
TRIMDEK OPTIMA 0.35mm BMT												
Span Type	Fastener per sheet per support		600	900	1200	1500	1800	2100	2400	2700	3000	3300
Single	5	Serviceability Strength *	2.79 8.40	2.25 6.96	1.72 5.57	1.25 4.31	0.85 3.23	0.54 2.39	0.34 1.84	0.23 1.49	0.18 1.31	
End	5	Serviceability Strength *	5.15 7.14	4.07 6.08	3.06 5.06	2.14 4.11	1.36 3.27	0.79 2.57	0.45 2.03	0.29 1.61	0.26 1.31	
Internal	5	Serviceability Strength *	2.04 8.24	1.87 6.67	1.69 5.17	1.52 3.83	1.34 2.70	1.17 1.89	0.99 1.76	0.82 1.64	0.65 1.51	0.48 1.39
TRIMDEK OPTIMA 0.42mm BMT												
Span Type	Fastener per sheet per support		600	900	1200	1500	1800	2100	2400	2700	3000	3300
Single	5	Serviceability Strength *	4.89 9.94	3.88 8.08	2.91 6.29	2.04 4.69	1.30 3.36	0.75 2.39	0.41 2.11	0.24 1.93	0.19 1.81	
End	5	Serviceability Strength *	6.57 9.40	5.24 8.08	3.99 6.80	2.85 5.60	1.88 4.52	1.16 3.60	0.71 2.87	0.48 2.29	0.40 1.81	
Internal	5	Serviceability Strength *	4.13 10.18	3.55 8.69	2.98 7.25	2.45 5.90	1.97 4.71	1.57 3.71	1.25 3.09	1.01 2.53	0.81 2.00	0.64 1.49
TRIMDEK OPTIMA 0.48mm BMT												
Span Type	Fastener per sheet per support		600	900	1200	1500	1800	2100	2400	2700	3000	3300
Single	5	Serviceability Strength *	6.69 11.27	5.28 9.04	3.93 6.91	2.72 5.02	1.69 3.47	0.93 2.39	0.47 2.35	0.25 2.30	0.19 2.24	
End	5	Serviceability Strength *	7.79 11.34	6.25 9.79	4.79 8.29	3.46 6.88	2.33 5.59	1.47 4.49	0.93 3.59	0.64 2.87	0.52 2.25	0.49 1.69
Internal	5	Serviceability Strength *	5.93 11.84	4.99 10.41	4.08 9.03	3.24 7.69	2.51 6.43	1.91 5.27	1.48 4.23	1.17 3.29	0.95 2.42	0.78 1.58

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).



TRIMDEK OPTIMA

TEST REPORT SUMMARY

PIC/RW/R/296/03/0

Maximum support spacings (mm)

Type of span	BMT	BMT	BMT	BMT
	0.30	0.35	0.42	0.48
Roofs				
Single span	600	900	1200	1600
End span	1400	1850	1900	2100
Internal span	1800	2100	2500	3000
Unstiffened overhang	150	150	150	150
Stiffened overhang	200	200	250	250
Walls				
Single span	1800	2000	2200	2300
End span	2400	2200	2500	2700
Internal span	3000	3300	3300	3300
Overhang	150	150	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 Trimdek Optima Brochure.*

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