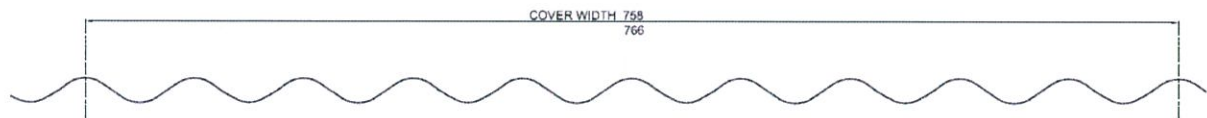


Profile:



Custom Orb profile

1. Limit State Load capacity for Custom Orb is provided for 0.42 & 0.48 BMT (G550).
2. Custom Orb is fastened using 3 or 5 screws per sheet to the support using #12-14x35 wafer head 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





CUSTOM ORB

TEST REPORT SUMMARY

PIC/RW/R/296/07/0

LYSAGHT CUSTOM ORB®: Limit State wind pressure capacities (kPa)

Span type	Fasteners per sheet per support		Span (mm)							
			600	900	1200	1500	1800	2100	2400	2700
Base metal thickness 0.42 mm										
SINGLE	3	Serviceability	1.91	1.46	1.08	0.77	0.49	-	-	-
		Strength	12.00	8.60	5.80	4.65	4.50	-	-	-
	5	Serviceability	5.39	3.20	1.75	0.94	0.45	-	-	-
		Strength	12.00	12.00	10.15	8.10	7.40	-	-	-
END	3	Serviceability	1.66	1.40	1.18	1.00	0.83	0.67	0.52	0.38
		Strength	9.15	7.55	5.90	4.50	3.40	2.70	2.30	2.00
	5	Serviceability	6.08	4.27	2.79	1.59	1.02	0.65	0.42	0.30
		Strength	12.00	12.00	9.90	7.55	5.75	4.50	3.60	3.05
INTERNAL	3	Serviceability	1.91	1.67	1.45	1.23	1.03	0.85	0.69	0.56
		Strength	11.35	9.25	7.45	6.00	4.85	3.90	3.20	2.70
	5	Serviceability	7.00	4.92	3.32	2.21	1.49	1.05	0.78	0.59
		Strength	12.00	12.00	12.00	10.80	8.85	7.10	5.65	4.50
Base metal thickness 0.48 mm										
SINGLE	3	Serviceability	2.12	1.47	1.03	0.77	0.60	-	-	-
		Strength	12.00	9.80	6.55	5.30	5.10	-	-	-
	5	Serviceability	7.48	3.74	2.23	1.26	0.57	-	-	-
		Strength	12.00	12.00	10.75	8.65	8.10	-	-	-
END	3	Serviceability	1.92	1.66	1.48	1.35	1.19	1.01	0.81	0.60
		Strength	11.70	9.05	6.80	4.95	4.10	3.45	3.00	2.65
	5	Serviceability	8.00	4.75	2.86	1.97	1.39	0.97	0.66	0.44
		Strength	12.00	12.00	12.00	10.60	8.00	6.20	5.00	4.25
INTERNAL	3	Serviceability	1.98	1.96	1.84	1.62	1.36	1.07	0.82	0.62
		Strength	12.00	10.15	8.50	7.10	5.70	4.55	3.60	2.90
	5	Serviceability	9.00	5.42	4.34	3.31	2.37	1.57	0.95	0.54
		Strength	12.00	12.00	12.00	12.00	11.00	8.65	6.75	5.25

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 $(\text{span}/120) + (\text{maximum fastener pitch}/30)$.



CUSTOM ORB

TEST REPORT SUMMARY

PIC/RW/R/296/07/0

Maximum support spacings (mm)

Type of span BMT (mm)	0.42	0.48
Roofs		
Single span	700	800
End span	900	1300
Internal span	1200	1700
Unstiffened eaves overhang	200	250
Stiffened eaves overhang	300	350
Walls		
Single span	1800	1800
End span	2500	2700
Internal span	2700	2700
Overhang	200	250

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 Custom Orb Brochure.*

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