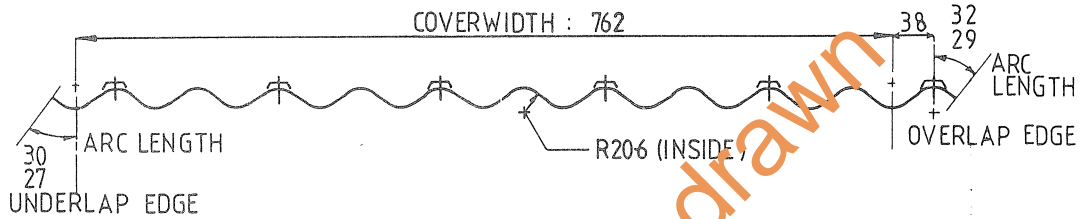


CUSTOM ORB FOR ROOFING & WALLING WITH CYCLONE WASHERS



MATERIAL SPECIFICATION: 0.53 mm TCT ZINCALUME STEEL TO AS 1197 - G550 - AZ150

TABLE 1 IS BASED ON CYCLIC TEST CRITERIA AS SPECIFIED IN N.B.T.C. TR 440. THE ALLOWABLE SPANS GIVEN IN TABLES 2 AND 3 HAVE BEEN OBTAINED BY LINEAR INTERPOLATION OF P_z IN TABLE 1, SUBJECT TO MAXIMUM SPAN LIMITATION GOVERNED BY CONCENTRATED LOAD CRITERIA. OVERHANGS TO BE 200 mm MAXIMUM FOR ROOFS AND 300 mm MAXIMUM FOR WALLS.

WIND LOADS ARE DETERMINED IN ACCORDANCE WITH AS 1170 PART 2 1983 "WIND FORCES LOADING CODE" FOR A REGIONAL BASIC WIND VELOCITY 55 M/S, CYCLONIC AREA MULTIPLIER OF 1.15 AND ASSUMING AN INTERNAL PRESSURE COEFFICIENT OF + 0.8 AND EXTERNAL PRESSURE COEFFICIENT OF - 0.9 (FOR ROOFS), OR - 0.6 (FOR WALLS). FOR TABLES 2 & 3 THE THREE SPANS FOR EACH TERRAIN CATEGORY ALLOW FOR LOCAL PRESSURE FACTOR K_1 AS PER PARAGRAPH B1.3 OF AS 1170 PART 2 - 1983. RACKING STRENGTH PROVIDED BY THE CLADDING HAS NOT BEEN TESTED AND SHOULD NOT BE ALLOWED FOR IN THE DESIGN OF THE STRUCTURE.

RECOMMENDED FASTENERS

Timber Supports	Self-drilling wood screw with EDPM seal
Strength Group *	
Hardwood J1 - J3	Type 17 Hex Hd. No. 14-10x50 (Lysaght No. THS 1450)
Softwood J4	Type 17 Hex Hd. No. 14-10x65 (Lysaght No. THS 1465)

Steel Supports	Self-drilling & tapping screw with EDPM seal
Steel Thickness	
Up to 2.5 mm.	No. 14-10x42 Hex Hd. (Lysaght No. SHS 1442)
2.5 - 5.0 mm.	No. 14-20x4 Hex Hd. (Lysaght No. SHS 1445)

When fixing over insulation blankets increase screw length to maintain fastener penetration in support.

TABLE 1: DESIGN WIND PRESSURE, P_z , kPa

SPAN mm	0.53 mm		
	SINGLE SPAN	END SPAN	INT. SPAN
900	8.8	6.6	8.3
1200	5.0	3.0	6.2
1500	2.5	1.5	3.6
1800	1.2	1.0	1.8
2100	-	0.6	1.3
2400	-	-	0.9
2700	-	-	0.6

TABLE 2: ROOF SHEETING MAXIMUM ALLOWABLE SPANS

TERRAIN CAT.	LOCAL PRESS. MULTI- PLIER	K1	P_z kPa	0.53 mm	
				END SPAN mm	INT. SPAN mm
CAT 1	1.0	4.85	1040	1350	
	1.09	1.5	6.13	940	1200
	2.0	7.41	830	1020	
CAT 2	1.0	4.08	1110	1440	
	1.00	1.5	5.16	1020	1320
	2.0	6.24	930	1190	
CAT 2.5	1.0	2.95	1200	1600	
	.85	1.5	3.73	1140	1480
	2.0	4.51	1070	1390	
CAT 3	1.0	2.00	1200	1600	
	.70	1.5	2.53	1200	1600
	2.0	3.06	1190	1590	

TABLE 3: WALL SHEETING MAXIMUM ALLOWABLE SPANS

TERRAIN CAT.	P_z kPa	0.53 mm		
		SINGLE SPAN mm	END SPAN mm	INT. SPAN mm
CAT 1	3.99	1320	1110	1450
	1.09	4.85	1220	1040
	5.70	1140	970	1250
CAT 2	3.36	1390	1170	1540
	1.00	4.08	1310	1110
	4.80	1220	1050	1360
CAT 2.5	2.43	1500	1310	1690
	.85	2.95	1440	1210
	3.47	1380	1160	1520
CAT 3	1.65	1500	1470	1890
	.70	2.00	1500	1400
	2.35	1500	1330	1700

* For strength groups refer AS 1720 - 1975

Manufacturers Name: LYSAGHT BUILDING INDUSTRIES		FIXING OF 0.53 mm CUSTOM ORB WITH CYCLONE WASHERS IN THE DARWIN AREA BUILDING HEIGHT UP TO 10 m	
Address: Cnr. Coonawarra and Bombing Roads, Winnellie. N.T. Phone: (089) 84 3311		DESIGN DATA SHEET	
CERTIFIED: <i>[Signature]</i>	M.I.E. Aust.	NORTHERN TERRITORY CYCLONIC AREAS	DRAWING NO.
DATE: 19/2/88		APPROVED: <i>[Signature]</i> M.I.E. Aust.	M/101/4
LYSAGHT DRAWING NO: 78391		DATE: 20/4/88	

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Engineering and Development
Lysaght Building Industries
A DIVISION OF JOHN LYSAGHT (AUSTRALIA) LIMITED (INCORPORATED IN NSW)

CYCLONIC FIXING DATA
CUSTOM ORB (0.53 mm TCT) WITH
CYCLONE WASHERS. UP TO 10 m.

78391



WP NO: C05310W

REFERENCES

REVISIONS