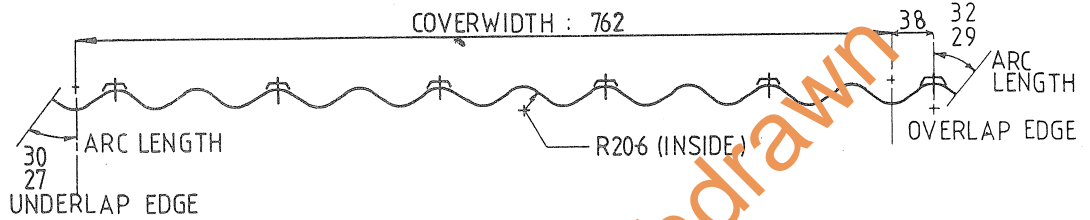


CUSTOM ORB FOR ROOFING & WALLING WITH CYCLONE WASHERS



MATERIAL SPECIFICATION: 0.47 mm TCT ZINCALUME STEEL TO AS 1397 - 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 B1.5 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	Strength Group *	Fastener
Hardwood J1 - J3	J4	Self-drilling wood screw with EDPM seal 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	Steel Thickness	Fastener
Up to 2.5 mm	2.5 - 5.0 mm	Self-drilling & tapping screw with EDPM seal No. 14-10x42 Hex Hd. (Lysaght No. SHS 1442) No. 14-20x45 Hex Hd. (Lysaght No. SHS 1445)

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

TABLE 1: DESIGN WIND PRESSURE, P_z , kPa

SPAN mm	0.47 mm		
	SINGLE SPAN	END SPAN	INT. SPAN
600	12.0	6.0	7.5
900	5.3	4.0	5.0
1200	3.0	2.1	3.7
1500	1.2	1.1	2.4
1800	0.6	0.6	1.4
2100	-	-	0.9
2400	-	-	0.6

TABLE 2: ROOF SHEETING MAXIMUM ALLOWABLE SPANS

TERRAIN CAT.	LOCAL MULTIPLIER	PRESS. FACTOR K_1	P_z kPa	0.47 mm	
				END SPAN mm	INT. SPAN mm
CAT 1	1.0	1.0	4.33	850	1050
	1.03	1.5	5.48	680	840
	2.0	2.0	6.62	540	700
CAT 2	1.0	1.0	3.61	900	1200
	.94	1.5	4.56	810	1000
	2.0	2.0	5.51	670	840
CAT 2.5	1.0	1.0	2.61	900	1200
	.80	1.5	3.30	900	1200
	2.0	2.0	3.99	900	1130
CAT 3	1.0	1.0	1.78	900	1200
	.66	1.5	2.25	900	1200
	2.0	2.0	2.72	900	1200

TABLE 3: WALL SHEETING MAXIMUM ALLOWABLE SPANS

TERRAIN CAT.	MULTIPLIER	P_z kPa	0.47 mm		
			SINGLE SPAN mm	END SPAN mm	INT. SPAN mm
CAT 1	3.57	1.03	1120	970	1230
	4.33	1.5	1020	850	1050
	5.09	2.0	920	730	890
CAT 2	2.97	.94	1200	1060	1370
	3.61	1.5	1120	960	1220
	4.24	2.0	1040	860	1070
CAT 2.5	2.15	.80	1200	1190	1570
	2.61	1.5	1200	1120	1450
	3.07	2.0	1190	1040	1340
CAT 3	1.46	.66	1200	1350	1780
	1.78	1.5	1200	1290	1680
	2.09	2.0	1200	1200	1590

* For strength groups refer AS 1720 - 1975

Manufacturers Name: LYSAGHT BUILDING INDUSTRIES		FIXING OF 0.47 mm CUSTOM ORB WITH CYCLONE WASHERS IN THE DARWIN AREA BUILDING HEIGHT UP TO 6 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	DATE: 20/4/88	M/101/1
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Performance
Company products will perform as specified if fixed in accordance with the recommendations contained in this drawing.

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DATE	19.2.88
DRAWN	T.G.
AUTH	

Engineering and Development
Lysaght Building Industries
A DIVISION OF JOHN LYSAGHT (AUSTRALIA) LIMITED (INCORPORATED IN NSW)
CYCLONIC FIXING DATA
CUSTOM ORB (0.47 mm TCT) WITH
CYCLONE WASHERS UP TO 6 m.



78385

WP NO: C04706W

REFERENCES

REVISIONS