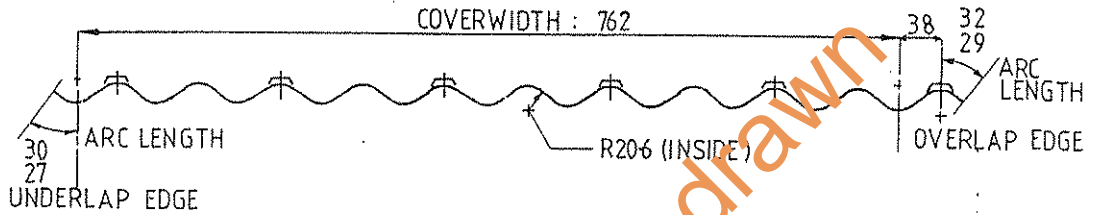


CUSTOM ORB FOR WALLING WITH CYCLONE WASHERS

WALLING



MATERIAL SPECIFICATION: 0.53 mm TCT ZINCALUME STEEL TO AS 1197 - G550 - A2150

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 K₁ AS PER PARAGRAPH B1.1.1 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	Fastener
Strength Group *	Self-drilling wood screw with EDPM seal
Hardwood J1 - J3	Type 1, Hex Hd. No. 14-10x50 (Lysaght No. THS 1450)
Softwood J4	Type 17 Hex Hd. No. 14-10x65 (Lysaght No. THS 1465)

Steel Supports	Fastener
Steel Thickness	Self-drilling & tapping screw with EDPM seal
Up to 2.5 mm	No. 14-10x42 Hex Hd. (Lysaght No. SHS 1442)
2.5 - 5.0 mm	No. 14-20x45 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. FACTOR K ₁	P _z kPa	0.53 mm END SPAN mm	0.53 mm INT. SPAN mm
CAT 1	1.0	4.85	1040	1350
	1.09	1.5	6.13	940
	2.0	7.41	830	1020
CAT 2	1.0	4.08	1110	1440
	1.00	1.5	5.16	1020
	2.0	6.24	930	1190
CAT 2.5	1.0	2.95	1200	1600
	.85	1.5	3.73	1140
	2.0	4.51	1070	1390
CAT 3	1.0	2.00	1200	1600
	.70	1.5	2.53	1200
	2.0	3.06	1190	1590

TABLE 3: WALL SHEETING MAXIMUM ALLOWABLE SPANS

TERRAIN CAT.	P _z kPa	0.53 mm		
MULTI-PLIER		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 APPROVED: <i>[Signature]</i>	DRAWING NO. <i>M/215/8</i>
DATE: 19/2/88		DATE: 20/4/88	
LYSAGHT DRAWING NO: 78391			

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SCALE N.T.S.

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 (0.53 mm TCT) WITH
CYCLONE WASHERS UP TO 10 m



78391

WP NO: C05310W

REFERENCES

REVISIONS