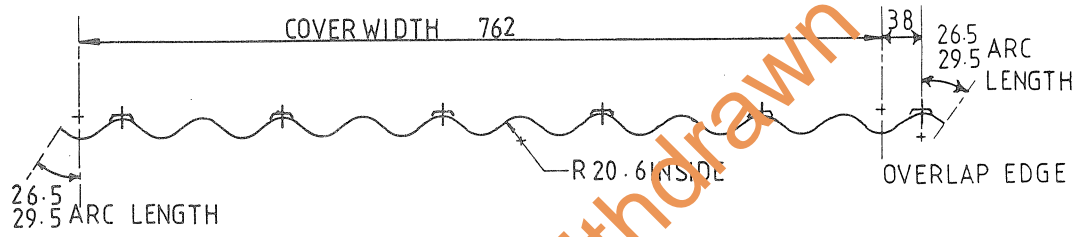


# CUSTOM BLUE ORB FOR ROOFING & WALLING WITH CYCLONE WASHERS



MATERIAL SPECIFICATION: 0.86 mm TCT ZINCALUME STEEL TO AS 1597 - G300 - AZ200

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 31.5 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 *	Self-drilling wood screw with EDPM seal
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	
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. 14-20x55 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	0.86 mm		
	SINGLE SPAN	END SPAN	INT. SPAN
900	8.8	7.3	9.1
1200	4.9	4.3	6.8
1500	3.1	2.8	4.5
1800	1.0	1.6	3.5
2100	0.5	1.0	2.2
2400	-	0.6	1.4
2700	-	-	1.0
3000	-	-	0.7

TABLE 2: ROOF SHEETING MAXIMUM ALLOWABLE SPANS

TERRAIN CAT.	LOCAL PRESS. FACTOR $K_1$	$P_z$ kPa	0.86 mm	
			END SPAN mm	INT. SPAN mm
CAT 1	1.0	4.85	1140	1450
	1.09	1.5	6.13	1010; 1280
	2.0	7.41	890	1120
CAT 2	1.0	4.08	1240	1620
	1.00	1.5	5.16	1110; 1410
	2.0	6.24	1000	1270
CAT 2.5	1.0	2.95	1470	1920
	.85	1.5	3.73	1310; 1730
	2.0	4.51	1180	1500
CAT 3	1.0	2.00	1700	2170
	.70	1.5	2.53	1560; 2020
	2.0	3.06	1450	1900

TABLE 3: WALL SHEETING MAXIMUM ALLOWABLE SPANS

TERRAIN CAT.	$P_z$ kPa	0.86 mm		
		SINGLE SPAN mm	END SPAN mm	INT. SPAN mm
CAT 1	3.99	1350	1260	1650
	1.09	4.85	1210	1140; 1450
	5.70	1140	1060	1340
CAT 2	3.36	1450	1380	1830
	1.00	4.08	1330	1240; 1620
	4.80	1210	1150	1460
CAT 2.5	2.43	1590	1590	2040
	.85	2.95	1470	1470; 1920
	3.47	1440	1360	1800
CAT 3	1.65	1700	1790	2300
	.70	2.00	1650	1700; 2170
	2.35	1600	1610	2060

\* For strength groups refer AS 1720 - 1975

Manufacturers Name: LYSAGHT BUILDING INDUSTRIES		FIXING OF 0.86 mm CUSTOM BLUE 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/ 8	
LYSAGHT DRAWING NO: 78401		DATE: 20/4/88	

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Performance  
Company products will perform as specified if fixed in accordance with the recommendations contained in this drawing.

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 BLUE ORB(0.86 mm TCT) WITH  
CYCLONE WASHERS UP TO 10 m.

78401



WP NO: CB08610W

REFERENCES

REVISIONS