CYCLONIC Wind Load Resistance - **Limit State** Design BCA NT Appendix, Specification B1.2

Table 1 **Limit State Wind Capacity (kPa)**

Span (mm)	Serviceability				Ultimate Strength			
	End Span		Internal Span		End Span		Internal Span	
	0.42 bmt	0.48 bmt	0.42 bmt	0.48 bmt	0.42 bmt	0.48 bmt	0.42 bmt	0.48 bmt
1000	3.00	3.60			6.25	8.10		
1200	2.15	2.50	3.00	3.60	5.10	6.60	6.25	8.05
1500	1.55	1.70	2.15	2.50	4.20	5.40	5.10	6.60
1800			1.55	1.70			4.20	5.40

Required Fixings : Standard concealed clips fixed in accordance with manufacturer's specification
Self drilling Tek screws 12 gauge - 14 tpi x 20mm length, 4 per 630 mm.
Minimum steel purlin thickness, 1.9mm G450 grade.

Table 2 **Maximum Recommended Span (mm)**

Condition	Roof		Wall	
	0.42 bmt	0.48 bmt	0.42 bmt	0.48 bmt
Single span	2000	2400	n.t.	n.t.
End span	2200	2700	1100	1250
Internal span	2600	4000	1200	1350
Unstiffened overhang	150	150	150	150
Stiffened overhang	#	#	#	#
Minimum slope	1°	1°	n/a	n/a

Consult Fielders for technical advice.
Recommended maximum roof span is based upon point loading , ref' AS 4040.1.
High wind loads may require shorter roof spans.
Maximum recommended wall span is based upon :-
Ultimate wind pressure of 3.6 kPa & serviceability wind pressure of 2.3 kPa.

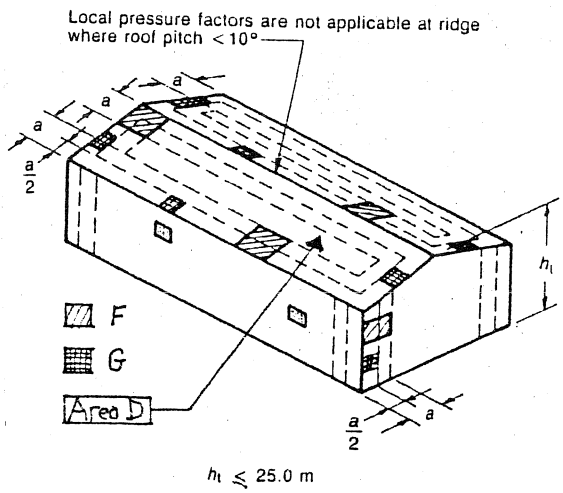
Note : After exposure of cladding to a severe wind event (V > 40 m/s), it is recommended that inspection be performed to confirm cladding integrity.

Table 3 **Max' allowable Roof Spans** for building height **<= 5.0m**

Terrain Category	Roof area Notation & Uplift (kPa)	0.42 bmt End Span (mm)	0.42 bmt Internal (mm)	0.48 bmt End Span (mm)	0.48 bmt Internal (mm)
1 & 2	D -4.24	1355	1740	1500	1785
	F -5.43	1155	1455	1295	1585
	G -6.63	975	1305	1130	1420
2 ½	D -3.60	1470	1765	1680	1930
	F -4.61	1290	1580	1420	1720
	G -5.63	1115	1420	1260	1550

Table 4 **Max' allowable Roof Spans** for building **5.0** < height **<= 10.0m**

Terrain Category	Roof area Notation & Uplift (kPa)	0.42 bmt End Span (mm)	0.42 bmt Internal (mm)	0.48 bmt End Span (mm)	0.48 bmt Internal (mm)
1 & 2	D -4.70	1275	1570	1405	1700
	F -6.03	1050	1375	1200	1500
	G -7.35	850	1215	1015	1330
2 ½	D -4.21	1355	1645	1495	1800
	F -5.38	1160	1460	1300	1590
	G -6.56	980	1315	1130	1430



Notes : Pressure is total ultimate value.
Max roof pitch < 10° C_{pe} = -0.90
Internal pressure C_{pi} = +0.70

We, Trevor John & Associates Pty Ltd., practicing structural engineers, certify that the data contained in the tables above was derived from satisfactory results of load testing of the Fielders HighKlip-630 according to the structural requirements of the Building Code of Australia Northern Territory Specification B 1.2
Product tested at Adelaide University, EngTest report C010707, November, 2001.

MANUF'R :	FIELDERS STEEL ROOFING P/L	FIXING OF:	**HiKlip-630** 0.42 & 0.48 mm b.m.t. with concealed clips IN THE DARWIN AREA
ADDRESS :	15 RAILWAY TERRACE MILE END SOUTH, S.A. 5031		
PHONE :	(08) 8292 3611		**DESIGN DATA SHEET 1**
CERTIFIED :	JOES3084	NORTHERN TERRITORY CYCLONIC AREAS	DRAWING NO. M /134 /1
DATE :	19 Feb' 2003	APP'D : DATE : 27-2-03	