

Product Name
HIKLIP® 630 CONCEALED FIX
 G550 0.42, 0.48 BMT & HPS 0.50 BMT

Product Description
ROOF CLADDING

Manufacturer's Name
FIELDERS AUSTRALIA PTY LTD
 15 Railway Terrace, Mile End South, S.A 5031

Design Criteria
 The allowable roof spans for the HiKlip® 630 roofing profile concealed fixed in Region C is shown in Tables 2 and 3. The allowable spans have been determined from tests carried out in accordance with AS/NZS 1170.2-2002 and the Building Code of Australia (BCA) 2008 for the design of buildings in cyclonic areas.

Design parameters for Tables 2 and 3 are shown below:
 Importance level 2
 $V_R = 66$ m/s
 $M_o = 1.00$
 $F_c = 1.05$
 $M_e = 1.00$
 $M_i = 1.00$
 $C_{pe} = -0.90$
 $C_{pi} = 0.70$
 $k_t = 1.5$ for Area F
 $k_t = 2.0$ for Area G

The local pressure factors (k_t) are shown in Figure 1. Local pressure factors are not applicable at the ridge where the roof pitch is less than 10°. The value of 'a' is the minimum of 0.2 breadth, 0.2 length or the height.

- Limitations $kl=3$ not included. Engineer to calculate accordingly
- Supporting purlins shall be cold formed steel, G450 Z350, minimum 1.5mm base metal thickness.
 - 12-14x20mm hex head metal teks suitable for fixing into minimum 1.5mm bmt - maximum 3.0mm bmt purlin gauges.
 - Table 2 roof spans are only applicable for buildings located in region C with roof heights up to 5m.
 - Table 3 roof spans are only applicable for buildings located in region C with roof heights from 5m - 10m.
 - Span data provided in tables 1 - 3 not suitable for use with light gauge steel or timber battens.

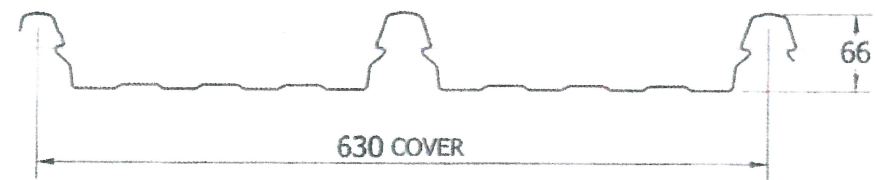
Accepted for Inclusion

DTCM ref: **M/163/01**

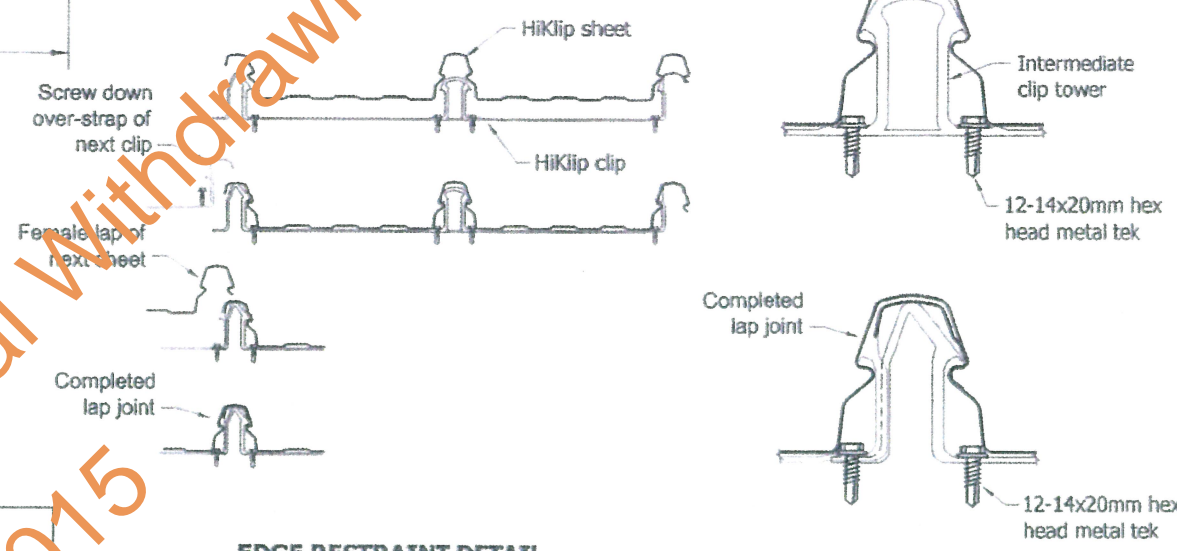
Chairman's Signature:

Chairman's Name: **STEVEN J THRLICH**

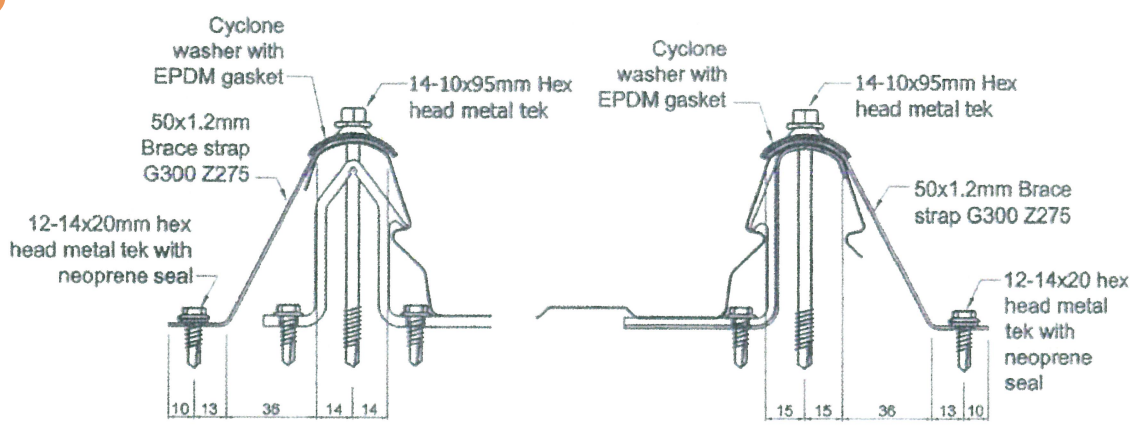
Date of Approval: **23.9.2010** Expiry Date: **23.9.2013**



CLIP FIXING DETAIL



EDGE RESTRAINT DETAIL



Note: Where sheets are cut longitudinally provide pan fastening equivalent of cyclone washer with 12-14x20 hex head metal tek.

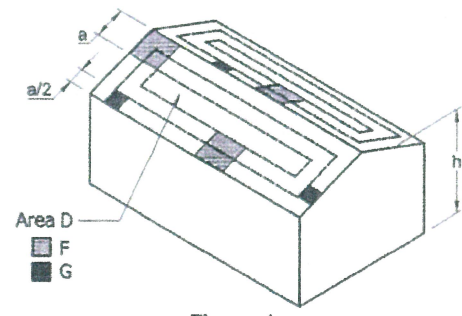


Figure 1

Table 1
 HiKlip® 630 Cyclonic Wind Load Capacity (kPa)
 - Strength Limit State

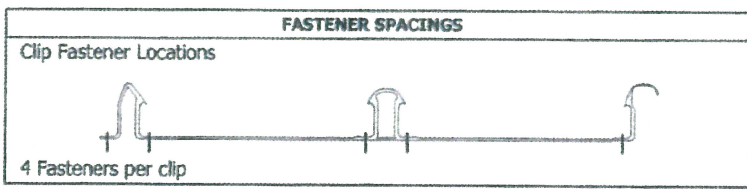
Span (mm)	0.42mm BMT		0.48mm BMT		0.50mm BMT	
	End Span	Internal Span	End Span	Internal Span	End Span	Internal Span
900	6.27		7.70		8.45	
1200	4.35	5.87	5.21	7.24	5.87	7.95
1500	3.28	4.38	3.85	5.29	4.43	5.93
1800	2.60	3.44	3.61	4.09	3.52	4.67
2100		2.81		3.29		3.81

Table 2
 HiKlip® 630 Maximum Allowable Roof Spans (mm) for Region C
 Building Height ≤ 5.0m

Terrain Category	Roof Area & Uplift (kPa)	0.42 mm BMT		0.48 mm BMT		0.50mm BMT	
		End Span	Internal Span	End Span	Internal Span	End Span	Internal Span
1 & 2	D - 4.18	1240	1550	1410	1770	1570	1960
	F - 5.35	1020	1260	1180	1490	1300	1620
	G - 6.53	870	1110	1010	1290	1100	1390
2½	D - 3.54	1410	1760	1590	1990	1790	2220
	F - 4.57	1160	1460	1330	1670	1470	1840
	G - 5.54	990	1250	1150	1450	1260	1580

Table 3
 HiKlip® 630 Maximum Allowable Roof Spans (mm) for Region C
 5.0 m < Building Height ≤ 10.0 m

Terrain Category	Roof Area & Uplift (kPa)	0.42 mm BMT		0.48 mm BMT		0.50mm BMT	
		End Span	Internal Span	End Span	Internal Span	End Span	Internal Span
1 & 2	D - 4.63	1140	1440	1310	1650	1450	1810
	F - 5.93	940	1190	1090	1380	1190	1500
	G - 7.23	800	1020	940	1200	1020	1290
2½	D - 4.13	1250	1570	1420	1790	1590	1920
	F - 5.30	1030	1300	1180	1500	1300	1630
	G - 6.46	880	1110	1020	1300	1110	1400



We, Trevor John & Associates Pty Ltd., practicing structural engineers, certify that the data contained on this sheet was derived from satisfactory results of LHL load testing conducted by ENGTEST University of Adelaide (Report No: "C090401", Dated: 22 May 2009) for the Fielders HiKlip® 630 cladding profile according to the structural requirements of the Building Code of Australia 2008.

**Design Engineers Certification
 Name: **TREVOR JOHN**
 Rego Number: **12178ES**
 Date: **13.04.2010**
 Signature:

**Certifying Engineers Certification
 Name: **DANIEL BREE (AURECON)**
 NT Rego Number: **14762ES**
 Date: **27/07/10**
 Signature:

New Expiry. **23.03.16**
 Signature:

New Expiry. **23/9/15**
 Signature: