

IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1) THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.

MAXIMUM SPAN (mm) TABLES FOR STEEL SUPPORTS

STEEL SUPPORT BMT ≥ 1.5mm

SGL.=SINGLE SPAN, END=END SPAN, INT.=INTERNAL SPAN

BUILDING HEIGHT	TERRAIN CATEGORY	K1	pz (kPa)	0.42 BMT			0.48 BMT		
				SGL.	END	INT.	SGL.	END	INT.
UP TO 5M	1	1	4.57	1390	1370	1440	1500	1500	1620
		1.5	5.86	1190	850	860	1310	1210	1250
		2	7.15	1080	670	730	N/A	820	840
		3	9.72	N/A	N/A	N/A	N/A	610	670
	2	1	3.44	1660	1680	1870	1750	1820	2030
		1.5	4.40	1420	1410	1490	1530	1540	1670
		2	5.37	1260	1210	1160	1380	1320	1380
		3	7.30	1060	640	720	1130	810	830
	2.5	1	3.49	1650	1660	1840	1740	1800	2010
		1.5	4.02	1480	1490	1630	1620	1650	1790
		2	4.91	1330	1300	1330	1450	1420	1510
		3	6.67	1120	730	780	1200	860	870
	3	1	2.86	1800	1800	2100	1970	2040	2100
		1.5	3.66	1580	1510	1770	1700	1750	1940
		2	4.47	1410	1390	1470	1520	1520	1650
		3	6.07	1170	820	840	1290	1080	1200
UP TO 10M	4	1	2.33	1800	1800	2100	2100	2100	2100
		1.5	2.99	1800	1800	2080	1910	1990	2100
		2	3.65	1590	1610	1770	1700	1750	1940
		3	4.96	1330	1290	1320	1440	1410	1490
	1	1	5.20	1290	1240	1240	1410	1360	1430
		1.5	6.67	1120	730	780	1200	860	870
		2	8.13	990	N/A	640	N/A	740	770
		3	11.06	N/A	N/A	N/A	N/A	N/A	520
	2	1	4.15	1460	1460	1590	1590	1610	1750
		1.5	5.2	1270	1220	1200	1380	1350	1400
		2	6.48	1140	760	800	1230	980	880
		3	8.82	930	N/A	N/A	N/A	680	730
	2.5	1	3.51	1640	1660	1830	1730	1790	2000
		1.5	4.50	1400	1390	1460	1510	1510	1640
		2	5.49	1240	980	950	1370	1290	1350
		3	7.46	1050	620	700	N/A	800	820
	3	1	2.86	1800	1880	2100	1970	2040	2100
		1.5	3.66	1580	1610	1770	1700	1750	1940
		2	4.47	1410	1390	1470	1520	1520	1650
		3	6.07	1170	820	840	1290	1080	1200
	4	1	2.33	1800	1800	2100	2100	2100	2100
		1.5	2.99	1800	1800	2080	1910	1990	2100
		2	3.65	1590	1610	1770	1700	1750	1940
		3	4.96	1330	1290	1320	1440	1410	1490

SPAN TYPE



RECOMMENDED ROOF FASTENERS FOR STEEL SUPPORTS

SCREW NOTATION CODE:	STEEL THICKNESS	CLASS 4 : SELF DRILLING & TAPPING HEX HEAD SCREW
HH DENOTED - HEX. HEAD T17 " - TYPE 17 HG " - HIGH GRIP TG " - TOP GRIP	≥ 1.5 mm	# 12 - 14 X 20 HH

Notes covering basis of DTCM sheet (Relevant test reports etc)

1. CYCLONIC TESTS OF KINGKLIP 700 MK2 ROOF SHEETING, REPORT REF. No. C070503, 03 DEC. 2007. TESTING CONDUCTED BY ENGTEST- UNIVERSITY OF ADELAIDE, TEST REPORT PREPARED FOR TREVOR JOHN & ASSOCIATES PTY LTD.
2. TESTING OF FIELDERS KINGKLIP 700 METAL ROOFING ASSEMBLY TO NCC 2016 BUILDING CODE OF AUSTRALIA - VOLUME TWO PART 3.10.1 (f). Index 5.1.2 REPORT 09.

ROOF DESIGN CAPACITY TABLES

ULTIMATE LIMIT STATE PRESSURE (kPa)

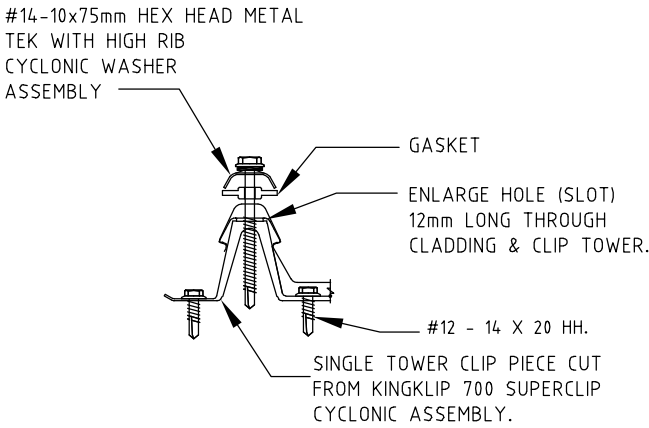
SERVICEABILITY LIMIT STATE PRESSURES CAN BE OBTAINED BY MULTIPLYING THE VALUES IN THE TABLE BELOW BY 0.46.

SPAN (mm)	0.42 BMT			0.48 BMT		
	SINGLE	END	INTERNAL	SINGLE	END	INTERNAL
450	-	-	-	10.35	12.6	-
600	-	7.65	7.5	9.90	10.8	-
900	9.28	5.62	5.52	6.29	6.29	-
1200	5.78	4.42	5.35	6.71	5.93	6.07
1500	3.9	3.98	4.39	4.58	4.57	4.95
1800	2.07	3.11	3.59	3.22	3.50	4.01
2100	-	-	2.95	2.61	2.71	3.27

MAXIMUM ROOF SUPPORT SPACING (mm)

SPAN TYPE	0.42 BMT	0.48 BMT
END	2000	2600
INTERNAL	2500	3000*
SINGLE	1600	2000

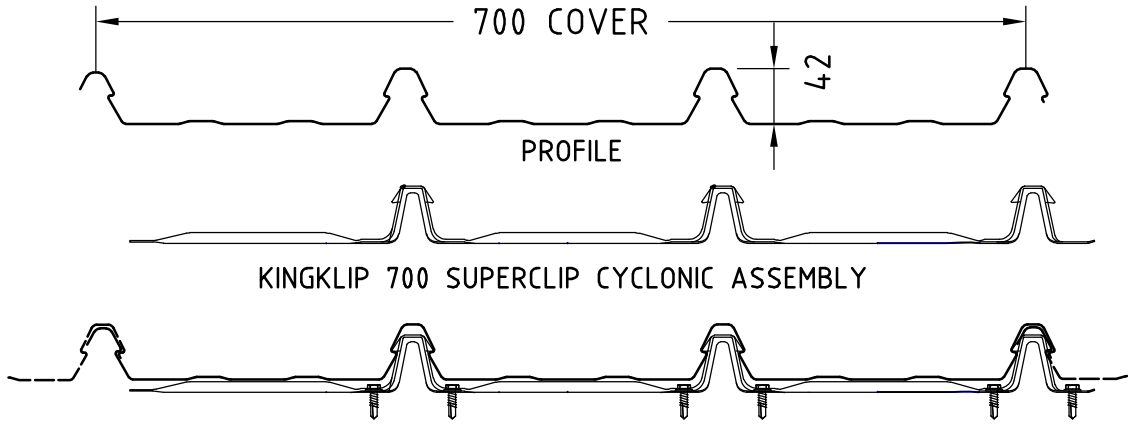
THE MAXIMUM SUPPORT SPACING CONSIDERS LIGHT ROOF TRAFFIC FROM INCIDENTAL MAINTENANCE.
* LONG SPANS REQUIRED PARTICULAR ATTENTION TO INSTALLATION PRACTICE.



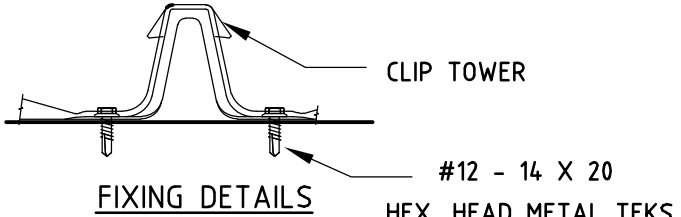
EDGE RESTRAINT DETAIL

INSTALLATION NOTES:

1. INSTALLATION SHALL BE IN ACCORDANCE WITH FIELDERS ROOFING & WALLING MANUAL.
2. CAPACITY TABLES ARE BASED ON TESTING THE ROOFING SYSTEM, CONSISTS OF FIELDERS SUPERCLIP ASSEMBLES, SAFETY MESH & INSULATION.
3. ALWAYS WALK OVER SUPPORTS IF POSSIBLE GENERALLY KEEP YOUR WEIGHT DISTRIBUTED EVENLY OVER THE SOLES OF YOUR SHOES.
4. NO PRE-BORED HOLES PERMITTED WHEN FASTENING TO SUPPORT.



FASTENER LOCATION: 6 FASTENERS PER ASSEMBLY



**Checking Engineers Certification

Name: SANDEEP SHARMA
Rego. Number: MIE AUST. 3101165
Date: 17/06/2020
Signature:

**registered as a structural engineer in Australia

**Certifying Engineers Certification

Name: STEPHEN HEALEY
NT Rego. Number: 34856ES
Date: 30/06/2020
Signature:

**registered as a structural engineer in Northern Territory

Product Name

KINGKLIP 700 - CONCEALED FIXED ROOFING FOR CYCLONIC REGIONS

Product Description

KINGKLIP 700 ROOFING IS MANUFACTURED FROM 0.42mm & 0.48mm BMT G550, AM125 ZINCALUME, AM100 COLORBOND, AM150 COLORBOND ULTRA, Z600 HERITAGE GALVANISED MATERIAL IS AVAILABLE IN SOME LOCATIONS.

Manufacturer's Name

FIELDERS AUSTRALIA PTY LTD
15 RAILWAY TERRACE, MILE END SOUTH
S.A. 5031



DESIGN CRITERIA

KINGKLIP 700 COMPLIES WITH AUSTRALIAN STANDARDS FOR THE FOLLOWING REQUIREMENTS:

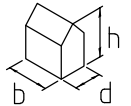
- A. WIND LOADING: AS/NZS 1170.2: 2011 STRUCTURAL DESIGN ACTIONS PART 2: WIND ACTION (INCORPORATING AMENDMENT No. 1, 2 & 3)
- WIND LOAD DESIGN CRITERIA:
1. IMPORTANCE LEVEL 2 WITH RETURN PERIOD OF 500 YEARS
 2. WIND REGION 'C', $V_R = 66xP_c = 66x1.05 = 69.3$ m/sec
 3. $M_s = M_t = M_d = 1.0$
 4. $C_{pe} = -0.9$; $C_{pi} = +0.7$ K_{ce} & $K_{ci} = 0.9$
 5. HEIGHT MULTIPLIERS FROM TABLE 4.1 OF AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS PART 2: WIND ACTIONS (INCORPORATING AMENDMENT No. 1, 2 & 3) HAVE BEEN USED TO GENERATE THE TABLES.

HEIGHT (m)	TERRAIN / HEIGHT MULTIPLIER (M_z, cat)				
	1	2	2.5	3	4
≤5	1.05	0.91	0.87	0.83	0.75
≤10	1.12	1.00	0.92	0.83	0.75

- B. CONCENTRATED LOAD AT MAXIMUM SPAN: AS 4040.0-1992: METHODS OF TESTING SHEET ROOF AND WALL CLADDING - INTRODUCTION, LIST OF METHODS AND GENERAL REQUIREMENTS; AS 4040.1-1992: METHODS OF TESTING SHEET ROOF AND WALL CLADDING - RESISTANCE TO CONCENTRATED LOADS
- C. SERVICEABILITY: AS/NZS 1170.0: 2002 STRUCTURAL DESIGN ACTIONS PART 0: GENERAL PRINCIPLES (INCORPORATING AMENDMENT 1, 2, 3, 4 & 5)
- D. PRODUCT METALLIC COATING COMPLIES WITH AS 1397-2011: CONTINUOUS HOT-DIP METALLIC COATED STEEL SHEET AND STRIP - COATINGS OF ZINC AND ZINC ALLOYED WITH ALUMINIUM AND MAGNESIUM & AS/NZS 2728: 2013 PREFINISHED/PREPAINTED SHEET METAL PRODUCTS FOR INTERIOR/EXTERIOR BUILDING APPLICATIONS - PERFORMANCE REQUIREMENTS
- E. INTERPOLATION OF CAPACITY AND SPACING VALUES IS PERMITTED.
- F. DESIGN TABLES ARE BASED ON THE TEST RESULTS IN ACCORDANCE WITH NCC 2016 BUILDING CODE OF AUSTRALIA - VOLUME 2 PART 3.10.1 (F) REQUIREMENTS FOR "LHL" CYCLONIC TEST FOR METAL ROOFS AND RELEVANT CLAUSES OF AS/NZS 4600: 2018 COLD-FORMED STEEL STRUCTURES.
- G. FOR ALL OTHER STEEL ROOFING DETAILS REFER TO FIELDERS ROOFING & WALLING MANUAL.

LIMITATIONS

1. ONLY FASTENERS NOTED ON THIS DTCS CAN BE USED FOR FIXING. ALL FASTENERS ARE TO BE CLASS 4 IN ACCORDANCE TO AS 3566.2-2002 SELF-DRILLING SCREWS FOR THE BUILDING AND CONSTRUCTION INDUSTRIES PART 2: CORROSION RESISTANCE REQUIREMENTS.
2. THE DATA IN THIS SHEET SHALL BE APPLICABLE TO KINGKLIP ROOFING ONLY. PROFILE DIMENSIONS OF KINGKLIP 700 AS SUPPLIED FOR INSTALLATION SHALL COMPLY WITH KINGKLIP 700 PRODUCT DRAWINGS AS DEVELOPED BY FIELDERS.
3. MAXIMUM KINGKLIP 700 ROOF LENGTHS AS RELATED TO RAINWATER CARRYING CAPACITY & ROOF PITCH SHALL BE DETERMINED USING THE FIELDERS ROOFING & WALLING MANUAL:
https://specifying.fielders.com.au/roofing-walling/cyclonic/kingklip-700-cyclonic/#Rainfall_Capacity
4. MAXIMUM OVERHANG SHALL BE DETAILED ACCORDING TO THE FIELDERS ROOFING & WALLING MANUAL.
5. DESIGN CAPACITY & SPAN TABLES ARE BASED ON FIXING INTO STEEL SUPPORTS WITH MIN. BMT OF 1.5mm & STEEL GRADE OF G450.
6. FOR DETAIL ON SLIDING BRACKET FOR FLASHING INSTALLATION REFER TO:
https://specifying.fielders.com.au/roofing-walling/cyclonic/kingklip-700-cyclonic/#KingKlip_700_Sliding_Bracket_for_Flashing_Installation
7. P_z (PRESSURE) IN THE TABLES SHALL BE INCREASED ACCORDING TO AS/NZS 1170.2:2011 CLAUSE 5.4.1 IN THE CASE OF: ELEVATED BUILDING ALLOWING FOR AIR FLOW UNDER: $-h/b > 1$, $-h/d > 1$.



Accepted for Inclusion

DTCM ref:M/718

Chairman's Signature:

Chairman's Name: Paul Nowland

Date of Approval:16/10/2020 Expiry Date: 16/10/2025