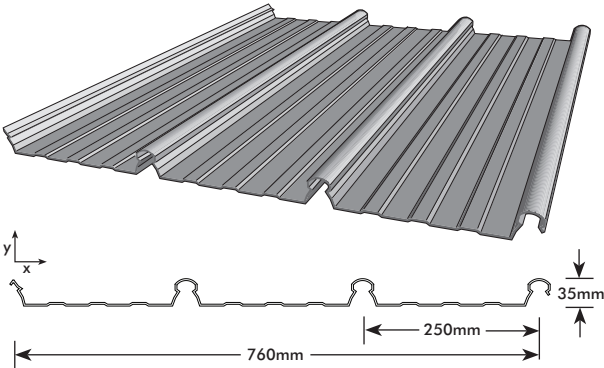


2.4 WideKlip® 760



WideKlip® 760 Material Specifications				
Property		0.42 BMT	0.48 BMT	Notes
Total Coated Thickness		0.47	0.53	TCT
Mass / Unit Length (kg/m)	ZINCALUME®	3.26	3.70	1000 / (m/Tonne)
	COLORBOND®	3.32	3.76	
Mass / Unit Area (kg/m ²)	ZINCALUME®	4.29	4.87	1000 / (m Mass/profile width)
	COLORBOND®	4.55	5.16	
2 nd moment of area about principal axis (10 ³ mm ⁴)	I _x	52	60	
	I _y	21100	24180	
Section modulus about principal axis (10 ³ mm ³)	Z _x	2	2	
	Z _y	54	62	
Warping Constant (10 ⁹ mm ⁶)	I _w	3	3	
Torsion Constant (mm ⁴)	J	24	35	
Minimum Yield Strength		G550		Base Steel Designation
Coating Class		AZ150		Minimum Coating g/m ² of Zinc - Aluminium
Coverage (mm)		760		
Tolerance		Sheet Length ±7mm Cover Width ±4mm		
Thermal Expansion		2.9mm average per 5m at 50° C change		

Table 2.4.A WideKlip® 760 Material Specifications

- WideKlip 760 is manufactured to AS 1397 and AS 2728 Cat. 3. It is to be installed in accordance with AS 1445, AS 1562, and HB39.
- The sectional properties are theoretical values per sheet width. These properties are gross values only.

Rainfall Capacity

For further information, please refer to sections 4.2 'Rainfall Intensity' and 4.3 'Water Carrying Capacity and Rainwater Run-Off'.

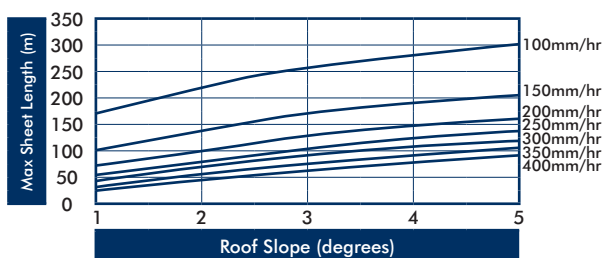


Figure 2.4.A WideKlip® 760 Rainfall Capacity (mm/hr)

WideKlip® 760 Maximum Sheet Length (m)

Roof Slope (degrees)	Rainfall Capacity (mm/hr)						
	100	150	200	250	300	350	400
1	134	89	67	54	45	38	34
2	190	126	95	76	63	54	47
3	232	155	116	93	77	66	58
4	268	179	134	107	89	77	67
5	300	200	150	120	100	86	75

Table 2.4.B WideKlip® 760 Maximum Sheet Length (m)

Non Cyclonic Load Span Tables

The allowable spans have been determined from tests carried out in accordance with the following Australian Standards (wind load available by region): AS 1562.1 :1992, "Design and installation of sheet roof and wall cladding - Metal" and AS 4040:1992, "Methods of testing sheet roof and wall cladding".

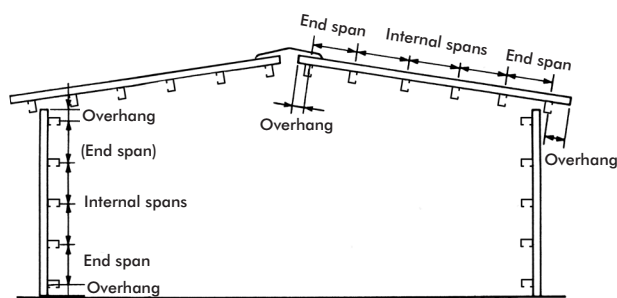


Figure 2.4.B End Spans, Internal Spans and Overhangs

Maximum Recommended Span* (mm) WideKlip® 760 Non Cyclonic

Span Type	0.42 BMT		0.48 BMT	
	Roof	Wall	Roof	Wall
Single Span	1100	1500	1350	1600
End Span	1300	1900	1800	2200
Internal Span	1800	2500	2400	2500
Unstiffened Overhang	150	150	150	150
Stiffened Overhang	N/A	N/A	N/A	N/A

Table 2.4.C WideKlip® 760 Recommended Span - Non Cyclonic

Design Parameters*

Region A:

$h = 10\text{m}$ $C_{p,e} = -0.65$ $P_u = 2.25\text{kPa}$
 $v_u = 50\text{m/s}$ $C_{p,i} = 0.2$ $P_s = 1.93\text{kPa}$
 $K_L = 2.0$

Concealed Fastening

Fasteners - Clip Fixing

Fasteners must be selected to match the life expectancy of the cladding material. Recommendations from fastener manufacturers should be sought.

Only fasteners complying with AS 3566:2002 and those that are compatible with the roofing material should be used for its fastening.

WideKlip® 760 Clip Fixing - Non Cyclonic

Fixing Supports	Without Insulation	With Insulation
Steel (up to 3.0mm)	10-16x25mm Metal Tek's hexagon head screws	10-16x25mm Metal Tek's hexagon head screws
Timber Hardwood	10-12x25mm Type 17 hexagon head screws	10-12x30mm Type 17 hexagon head screws
Timber Softwood	M5.5-11x40mm Batten Zips hexagon head screws	M5.5-11x40mm Batten Zips hexagon head screws

Table 2.4.E WideKlip® 760 Clip Fixing - Non Cyclonic

Note: The above screws are for clip fastening only

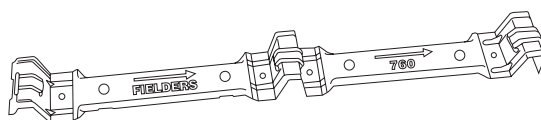


Figure 2.4.C WideKlip® Concealed Fix Clipping System

For further information, please refer to section 4.4 "Comparative Analysis: Concealed Fix vs. Screw Fix".

WideKlip® 760 Wind Load Capacity - Limit State Design (kPa) Non - Cyclonic

Span (mm)	0.42 BMT						0.48 BMT					
	Single Span		End Span		Internal Span		Single Span		End Span		Internal Span	
	Service-ability	Strength	Service-ability	Strength	Service-ability	Strength	Service-ability	Strength	Service-ability	Strength	Service-ability	Strength
1200	3.75	4.30	3.40	4.50	3.75	5.50	4.50	5.25	3.65	7.15	6.85	8.00
1500	1.90	2.75	2.75	3.25	3.40	4.60	2.35	3.30	3.35	5.10	5.25	6.15
1800	1.15	1.90	2.20	2.50	3.05	3.75	1.45	2.50	2.90	3.75	3.85	4.60
2100	0.80	1.50	1.75	2.00	2.60	3.00	1.04	2.10	2.30	2.60	2.90	3.30
2400	0.55	1.30	1.35	1.60	2.10	2.45	0.75	2.00	1.65	2.00	2.10	2.45
2700	0.35	1.15	1.00	1.30	1.65	1.95	0.60	1.95	1.15	1.55	1.65	1.95
3000	-	-	0.75	1.10	1.30	1.55	0.45	1.90	0.85	1.35	1.30	1.55
3300	-	-	-	-	1.00	1.30	-	-	-	-	1.10	1.30

Table 2.4.D WideKlip® 760 Wind Load Capacity - Limit State Design (kPa) - Non Cyclonic

WideKlip® 760 Installation Procedure

Step 1

Fix the first of the WideKlip 760 clips, the arrow on clip pointing toward the area to be laid, perpendicular to the gutter in a straight line. Be sure to use the correct fasteners.

Use a string line or the edge of the first sheet to ensure the straightness of the sheets. Care should be taken so that the overlap is facing away from the prevailing weather.

Step 2

If vermin proofing is required at the eave and ridge line, insert a purpose made profiled polyethylene strip into the clip prior to fixing to the purlin.

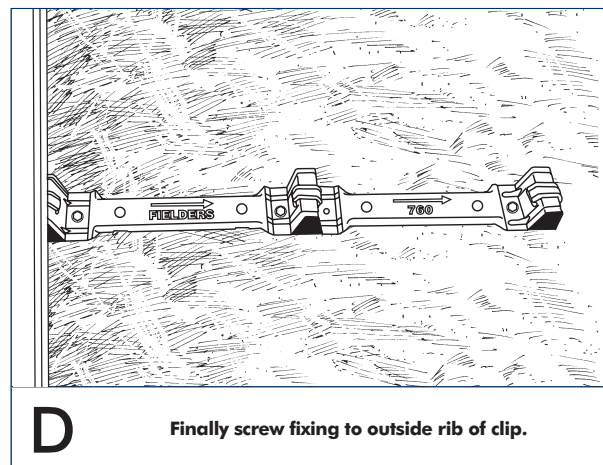
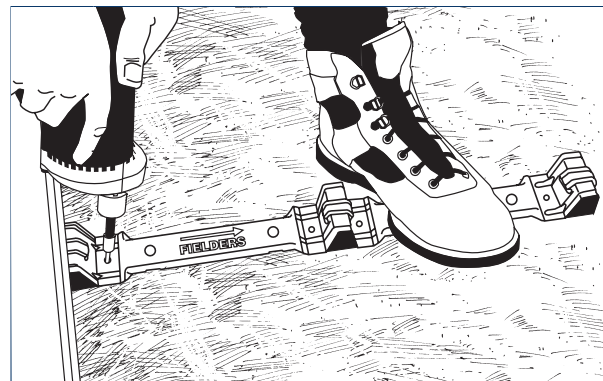
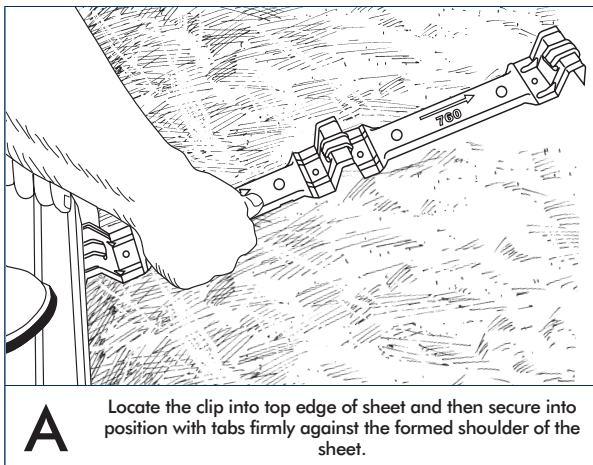
Step 3

Locate the first sheet above the clips ensuring that the overhang into the gutter is correct. Push downwards on the sheet until the decking is secured at every clip.

Step 4

Place the next clip firmly against the male rib of the last sheet and fasten into position. Ensure that the male rib is in a straight line and not deformed. (Refer to clip placement and fastening instructions on the next page – A, B, C, and D).

Typical WideKlip® 760 Clip Placement & Fastening

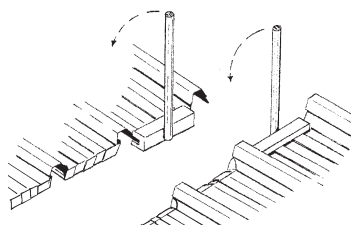


Step 5

Lay the next sheet of WideKlip 760 as done previously. Checks should be made periodically to ensure the decking is installed correctly and maintains a 760 mm coverage.

Step 6

Turn up pans at ridge line, pans should be turned down at gutter line using Fielders KingKlip/WideKlip tool.



Step 7

Clean the roof daily during construction as per Fielders maintenance guide removing all swarf, pop rivets and fasteners.

Foot traffic should be restricted to the pans of the decking over the purlins only.

Turning of Roof Sheeting Ends

Refer to section 4.8 "Flashings, Cappings and Ends of Sheets".

Designing Without Step Joints

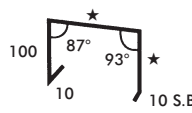
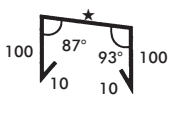
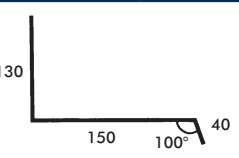
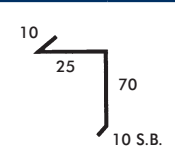
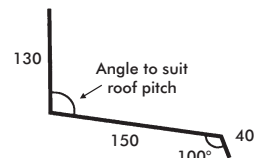
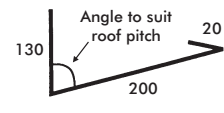
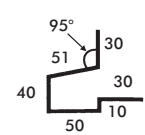
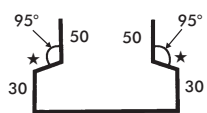

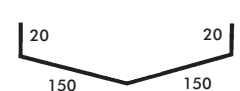
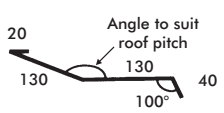
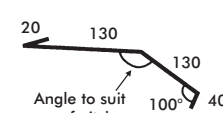
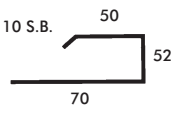
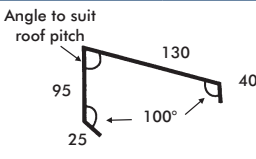
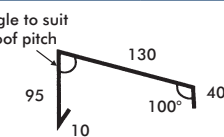
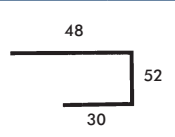
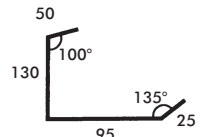
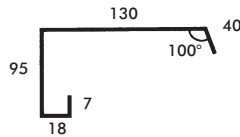
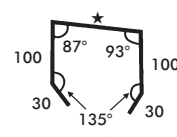
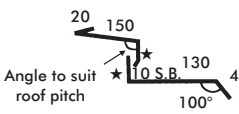
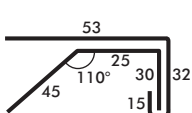
Refer to section 4.1 "Long Length Roofing Solutions".

Maximum Sheet Length

See section 4.9 "Thermal Expansion and Contraction of Steel Sheeting".

Curving of WideKlip® 760

For details regarding spring curving of WideKlip 760 sheets, please see section 4.5 "Curving of Steel Decks".

WideKlip® 760 Flashings & Details			
Masonry Parapet Side Wall (Low)	Masonry Parapet Side Wall (High)	Apron Flashings	Overflashing
 <p>Product Code: WK1</p>	 <p>Product Code: WK2</p>	 <p>Product Code: WK3 GIRTH 330</p>	 <p>Product Code: WK4 Girth 112</p>
Headwall Apron Flashing	Soaker Gutter	Soffit Corner Flashing	Shoe Flashing
 <p>Product Code: WK5 Girth 350</p>	 <p>Product Code: WK6 Girth 350</p>	 <p>Product Code: WK7 Girth 211</p>	 <p>Product Code: WK8</p>
Bracket	Valley Gutter	Under Over Flashing	Mansard Roof Flashing
 <p>Product Code: WK10</p>	 <p>Product Code: WK11 Girth 340</p>	 <p>Product Code: WK12 Girth 330</p>	 <p>Product Code: WK13 Girth 330</p>
Industrial Door Jamb Flashing	Apex Capping Type 1	Apex Capping Type 2	Back Channel
 <p>Product Code: WK14 Girth 182</p>	 <p>Product Code: WK17 Girth 300</p>	 <p>Product Code: WK18 Girth 285</p>	 <p>Product Code: WK19 Girth 130</p>
Barge Capping Steel Construction	Barge Capping	Framed Parapet Capping	Two Piece Step Flashing
 <p>Product Code: WK20 Girth 300</p>	 <p>Product Code: WK22 Girth 300</p>	 <p>Product Code: WK23</p>	 <p>Product Code: WK24</p>
Sliding Bracket			
 <p>Product Code: WK25</p>			

1. * denotes size to be determined by application. All sizes are in mm and should be used as a guide only. They should be measured on-site to determine actual size.
2. S.B. denotes 'Slight Break'.
3. Also refer to section 4.6 "Typical Roofing Details".

Table 2.4.F WideKlip® 760 Flashings & Details