Steeline
LOKDEK 700 MK2

HI-TENSILE CONCEALED FIXED ROOF OR WALL CLADDING

BEST IN THE LONG RUN

Colorbond® Zincalume®

LOKDEK 700 MK2 is a concealed fixed roof using NO roof piercing fasteners. This allows thermal expansion on long roof sheets. Wide spans and high ribs give excellent water carrying capacity down to one degree roof pitch.

LOKDEK 700 MK2 is suitable for domestic and commercial roofing and is available in a wide range of Colorbond® colours.

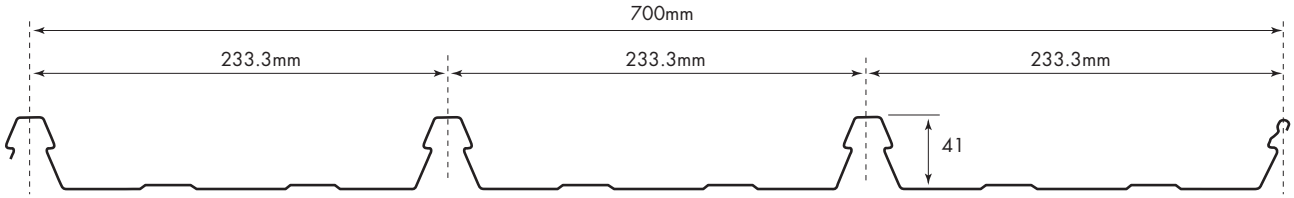
Steeline

Steeline LOKDEK 700 MK2

Suitable for all roof and wall cladding applications, Steeline LOKDEK 700 MK2 is available in two thicknesses cut to length. Each sheet has a 700mm cover width, and is designed to lock down over concealed fixing clips.

When the ribs of Steeline LOKDEK are snapped together an anti-capillary space is formed, preventing the entry of water. Because of the deep and widely spaced ribs, Steeline LOKDEK has very good water run-off capabilities, and can be used down to roof pitches as low as 1° (1 in 60).

Made from quality Colorbond® or Zincalume® steel, Steeline LOKDEK 700 MK2 is strong and long lasting and... BEST IN THE LONG RUN.



Material Specification

Available in Zincalume, Colorbond and Galvanised.

0.42 or 0.48	Zincalume®	G550 AM125
0.42 or 0.48	Colorbond®	G550 AM100
0.42 or 0.48	Galvanised	G550 Z450

SPECIAL ORDERS

Available in Metallic, Coolmax, Ultra and Matt.

Product Mass

	BMT	kg/m²	m²/Tonne
0.42	Zincalume®	4.61	217
0.42	Colorbond®	4.64	215
0.42	Galvanised	5.05	198
0.48	Zincalume®	5.24	191
0.48	Colorbond®	5.25	189

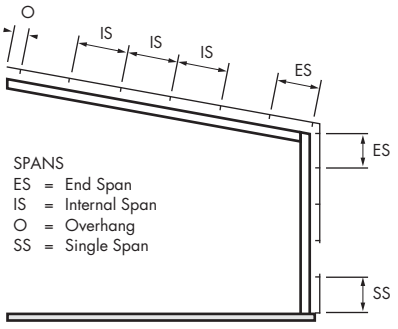
Wind Load Conversion

WIND CLASSIFICATION	REGION & CATEGORY
(Domestic)	(Commercial/Industrial)
N1 (W28)	Reg A, Cat 3
N2 (W33)	Reg A, Cat 2.5 - Reg B, Cat 3
N3 (W41)	Reg A, Cat 2 - Reg B, Cat 2.5
N4 (W50)	Reg B, Cat 2

Maximum Support Spacings (mm)

Type of Span	Thickness (mm)	BMT
	.42	.48
ROOFS		
Single Span	1700	2000
End Span	1800	2100
InternalSpan	2100	2400
Unstiffened Eaves Overhang	150	200

Maximum Support Spacing has been determined by load tests and deflection in accordance with AS 1562-1 AS 4040 1 & 2 1992.



Colorbond® Zincalume®

Steeline

Steeline LOKDEK 700 MK2
FIXING DETAILS

HI-TENSILE CONCEALED FIXED ROOF OR WALL CLADDING

Fig.1 Clip

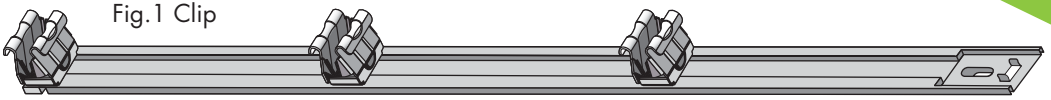


Fig.1 shows the clips used in this installation of the LOKDEK 700 Mk2 system.

Fig.2 Sheets should be layed towards prevailing weather.

Before starting check batten alignment, roof pitch and sheet orientation. It is best to turn sheets on the ground and check that the overlapping side is towards the the edge where the installation starts, before transporting them to the roof.

When crane loading, place packs over rafters, not mid span.

The first and last clip should be a minimum 75mm from the end of the sheet.

Installation Procedure for Roofs - Fig.3

Note: First be sure to lay safety mesh over the entire area.

1. Cut and secure the first row of clips over insulation.

   Note: It is important to fix the first row of clips in line and square to the barge. Use a string line or straight edge.

2. Fix the first row of clips with two hex head screws per clip working towards the high end of the roof.

3. Fix the next row of clips using the locating tabs, bend the tabs to secure. Use three hex head screws per clip. Drive hex-head screws through the top of the clip into the support.

4. Working along the edge of the roof, place the first sheet over the clips, square to adjacent edges, and check the overhang into the gutter (usually 50mm) then snap onto clips using light foot pressure.

5. Place the next sheet over the clips and check overhang before engaging the sheet. Keep the gutter-end of all sheets in a straight line at all times.

   Note: Care must be taken not to walk on the under rib pan until the sheets are fully secured. DO NOT walk in the unsupported pan beside the underlap. Check alignment occasionally to make sure sheets are parallel.

   It is important to ensure the overlapping rib adequately engages onto the underlapping leg.

   Occasionally check the allignment. Take two measurements across the width of the fixed sheeting to ensure that all sheets are parallel with the first sheet.

6. Secure the last sheet with a finishing clip - Fig 5.

   Note: If the final space is less than the full width of a sheet, cut a sheet along its length and shorten the clips.

   To prevent sheets from sliding down in the clips, place a screw in the pan under the flashing or capping, along the top of the sheets.

Installation Procedure for Walls

The same general procedure should be used in walling applications, however horizontal pressure will need to be applied to the sheets to engage the ribs. Use your body, hand or foot, or a rubber mallet if required, to apply pressure to engage the ribs.

Fig.2

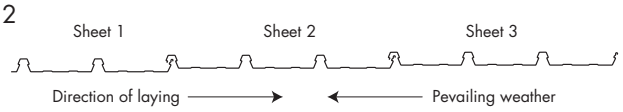


Fig.3

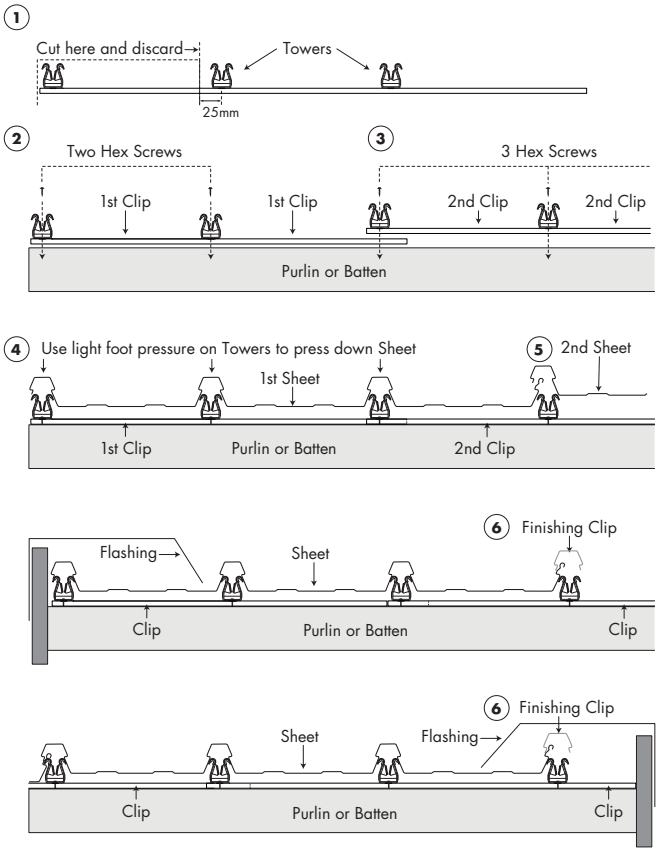


Fig. 4
Shows the starting position of sheets.

Fig.4

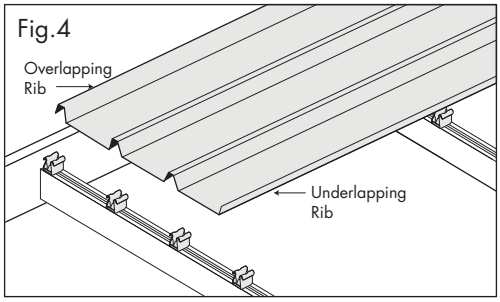
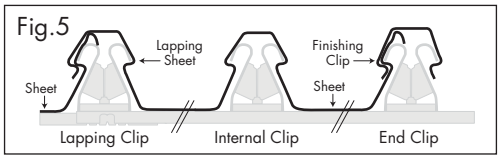


Fig. 5
Cladding Sheet engaged with the Lokdek 700 Clip.

Fig.5



Colorbond® Zincalume®

Ph. 1300 STEELINE **steeline.com.au** **Service over and above**

Steeline LOKDEK 700 MK2

HI-TENSILE CONCEALED FIXED ROOF OR WALL CLADDING

.42 Bmt LOKDEK 700 MK2

Limit State Wind Pressure Capacities (kpa)

3 Screws per Clip

SPAN TYPE		Span mm 900	1200	1500	1800	2100
SINGLE	Serviceability	1.75	1.66	1.25	0.99	0.76
	Strength	3.97	3.89	3.09	2.50	2.13
END	Serviceability	1.88	1.83	1.76	1.49	1.15
	Strength	3.67	3.47	2.77	2.37	1.65
INTERNAL	Serviceability	1.93	1.88	1.83	1.76	1.49
	Strength	3.93	3.67	3.47	2.77	2.37

NOTE: *Variability factor of 1.1 to 1.2 have been applied to these tables.*

.48 Bmt LOKDEK 700 MK2

Limit State Wind Pressure Capacities (kpa)

3 Screws per Clip

SPAN TYPE		Span mm 900	1200	1500	1800	2100	2400
SINGLE	Serviceability	2.47	2.02	1.58	1.25	0.90	0.65
	Strength	6.85	5.64	4.46	3.31	2.20	1.10
END	Serviceability	2.38	2.36	2.16	1.78	1.45	0.73
	Strength	4.34	3.75	3.22	2.81	2.46	2.23
INTERNAL	Serviceability	2.67	2.55	2.36	2.16	1.78	1.45
	Strength	5.05	4.35	3.75	3.22	2.81	2.46

NOTE: *Variability factor of 1.1 to 1.2 have been applied to these tables.*

Design Considerations

Recommended mininimum Pitch:
.42 LOKDEK = 2^0
.48 LOKDEK = 1^0

Length

- LOKDEK 700 Mk2 is custom cut to your exact length.
- Length is governed by transport regulations.
- 25 metre sheets can be carried on our extendable trailers.

Compliance

Wind pressure capacitiy tables have been determined by full scale testing in accordance with AS 1562.1 and AS 4040.1&2 1992.

Non-Cyclonic areas.

Benefits of LOKDEK Roofing

- Pitch down to 1^0.
- No Pierced fixing, eliminating potential leeks.
- Clips provide for thermal expansion on long sheets.
- Strong ribbed trays give excellent water carrying capacity.

Water Carrying Capacity

Maximum roof run for drainage (m)

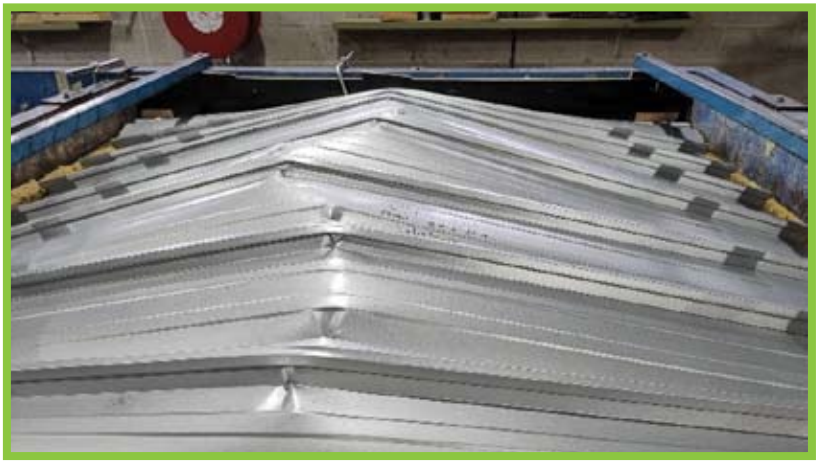
Roof Slope	Peak Rainfall Intensity (mm/hr)				
	150	180	200	250	300
1^0	262	218	196	157	131
3^0	454	378	340	272	227
5^0	586	488	439	351	293

Fixing to Steel or Timber

	Fixing to Steel	Fixing to Timber
HEX HD	12 - 14 x 20	M 5.5 x 40
Insulwool	12 - 14 x 30	

Independant Testing

Cyclone Testing Station - James Cook University.



Air Box Testing - James Cook University

Colorbond® Zincalume®

Steeline

NEW PRODUCT

STEELINE LOKDEK 700 MK2

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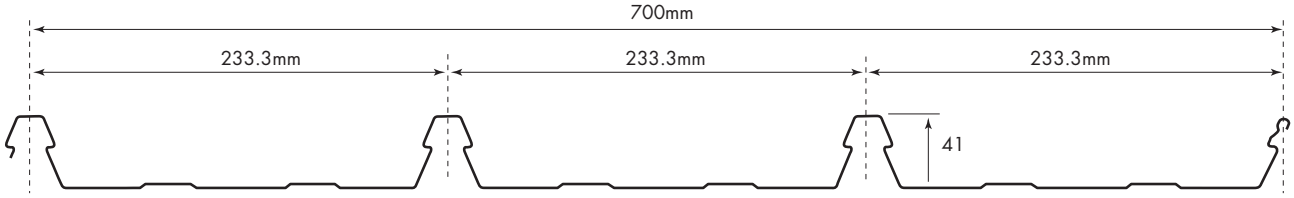
Dimensions



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0.42 or 0.48	Zincalume®	G550 AM125
0.42 or 0.48	Colorbond®	G550 AM100
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Special Orders - Available in Metallic, Coolmax, Ultra & Matt.

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Wind Load Conversion

WIND CLASSIFICATION (Domestic)	REGION & CATEGORY (Commercial/Industrial)
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N2 (W33)	Reg A, Cat 2.5 - Reg B, Cat 3
N3 (W41)	Reg A, Cat 2 - Reg B, Cat 2.5
N4 (W50)	Reg B, Cat 2

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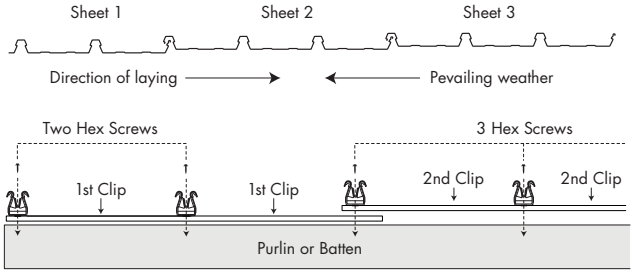
Clip

Typical Fixing

All sheets should be layed towards prevailing weather.



Note: See brochure for full fixing details and installation.

Maximum Support Spacings (mm)

Type of Span	Thickness (mm)	BMT
ROOFS	**.42**	**.48**
Single Span	1700	2000
End Span	1800	2100
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Steeline LOKDEK 700 MK2
EXPANSION JOINT OPTIONS

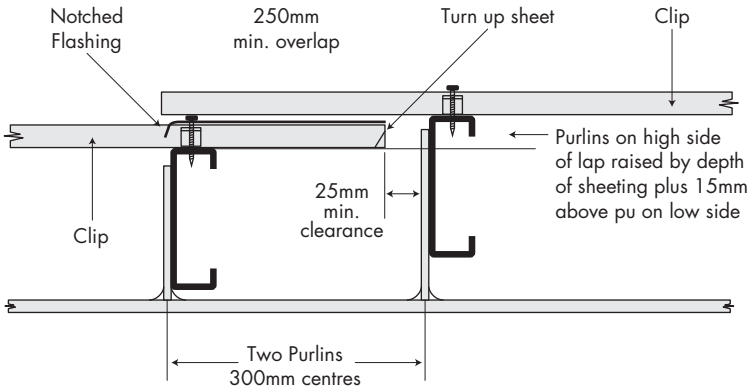
HI-TENSILE CONCEALED FIXED ROOF OR WALL CLADDING

Method 1

Fig.1 **Stepped Purlin Expansion Joint**

Requires an extra purlin per step lap.

Fig.1



Method 2 - LOKDEK 700 Expansion Joint

Foam Weather Strip Expansion Joint. No extra purlin required.

Fig.1

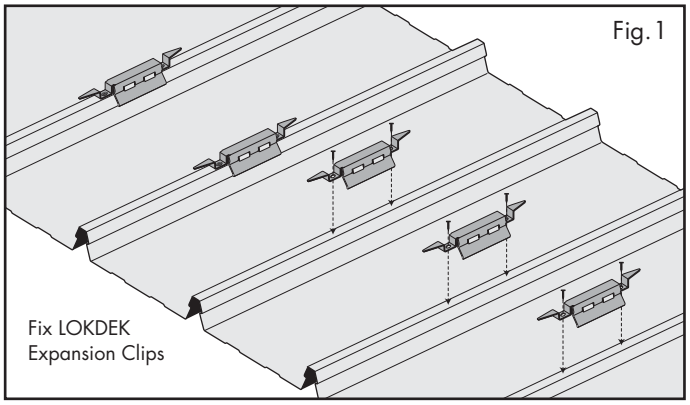


Fig. 1 - The LOKDEK 700 MK2 Expansion Clips are secured with two screws to the top of the ribs as shown above.

Fix Weatherstrips to LOKDEK 700 Expansion Clips.

Fig.2

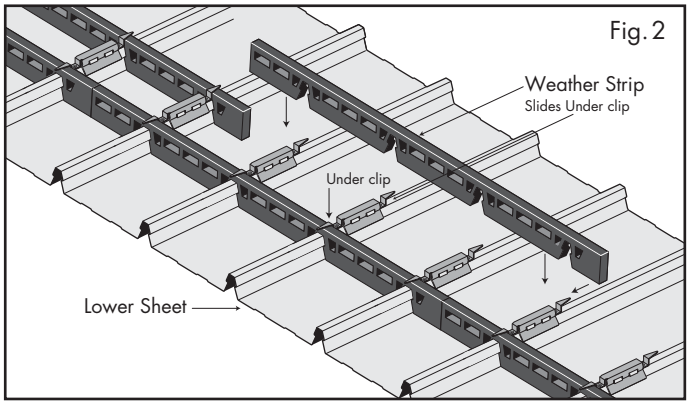


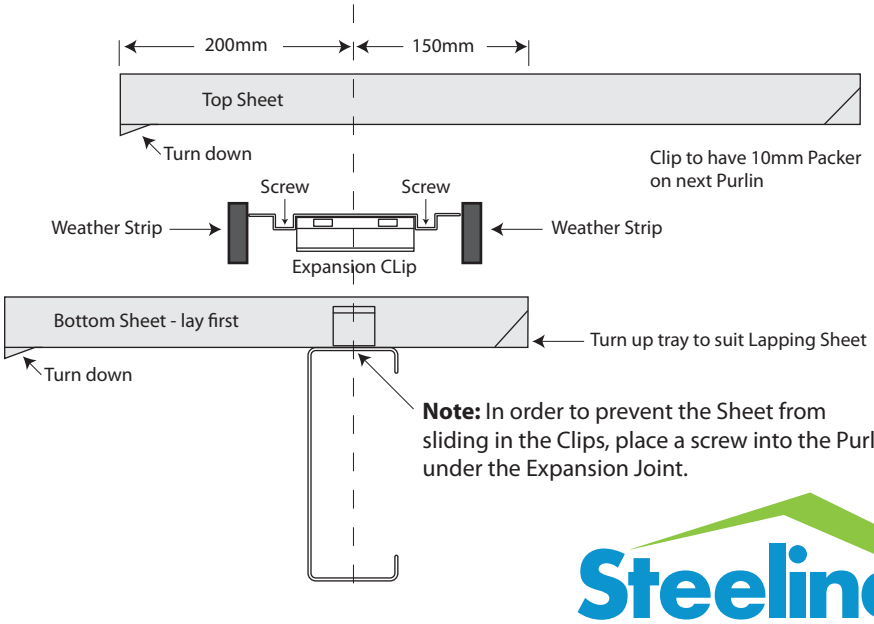
Fig. 2 - Weather Strips are layed both sides of the LOKDEK 700 MK 2 Expansion Clips, pushed down, slid under and offset as shown above.

Fixing Instructions

- Expansion Clip screwed to bottom sheet
- Press Weather strips onto both sides of the Expansion Clip.
- Stop end bottom sheet to suit the gap between top and bottom sheets.
- Top sheet will require a 10 mm packer under the last clip before the expansion joint to reduce roof ski.
- Turn down the top sheet before installation then clip the sheet onto clips

Note: The Purlin centres shall not exceed the recommended end Spans either side of the expansion Joint.

Translucent sheeting Spans **to manufacturers recommendations**.



Note: In order to prevent the Sheet from sliding in the Clips, place a screw into the Purlin under the Expansion Joint.

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