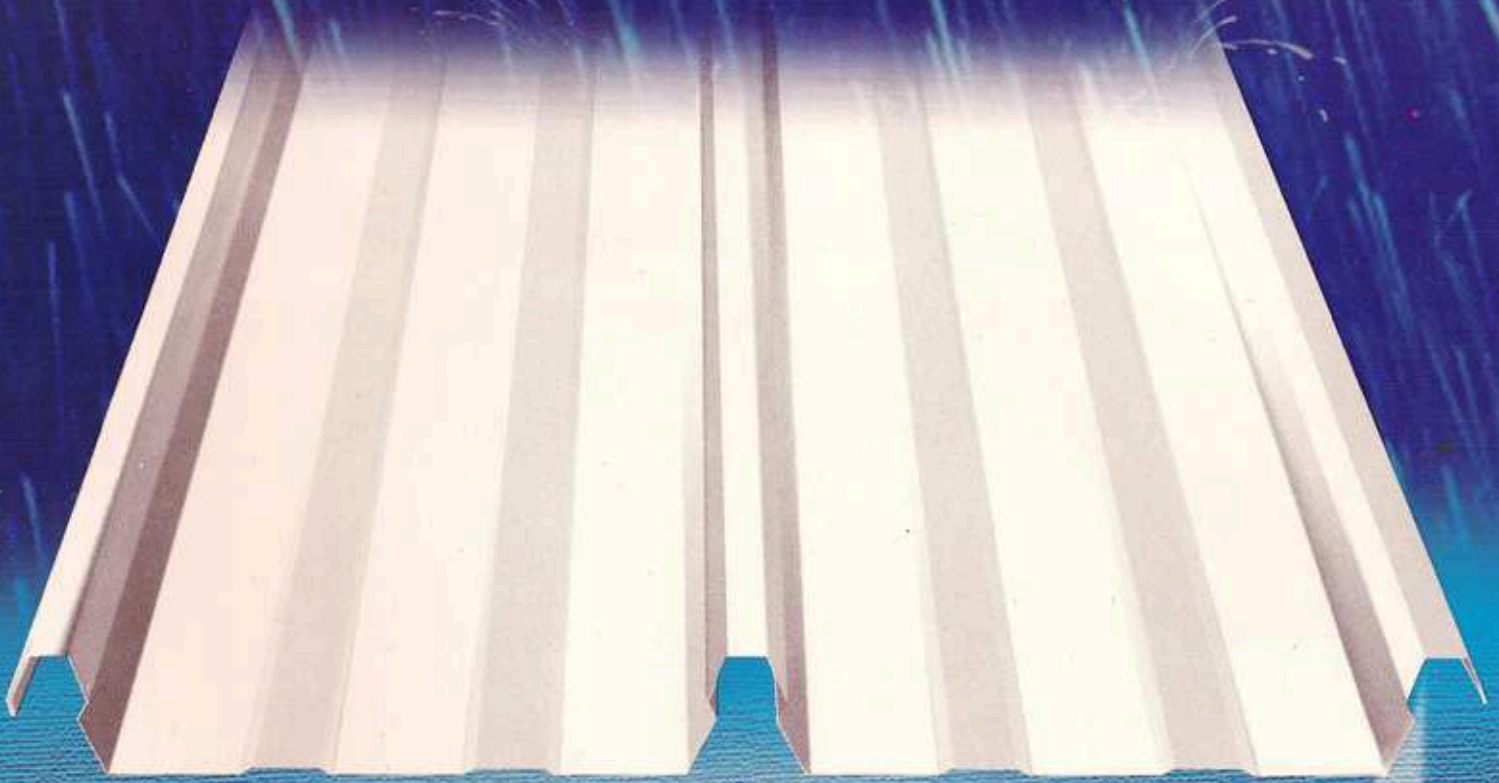


The Best For The Worst Conditions.



Colorbond[®]

Clip-type concealed

KLIP-L K



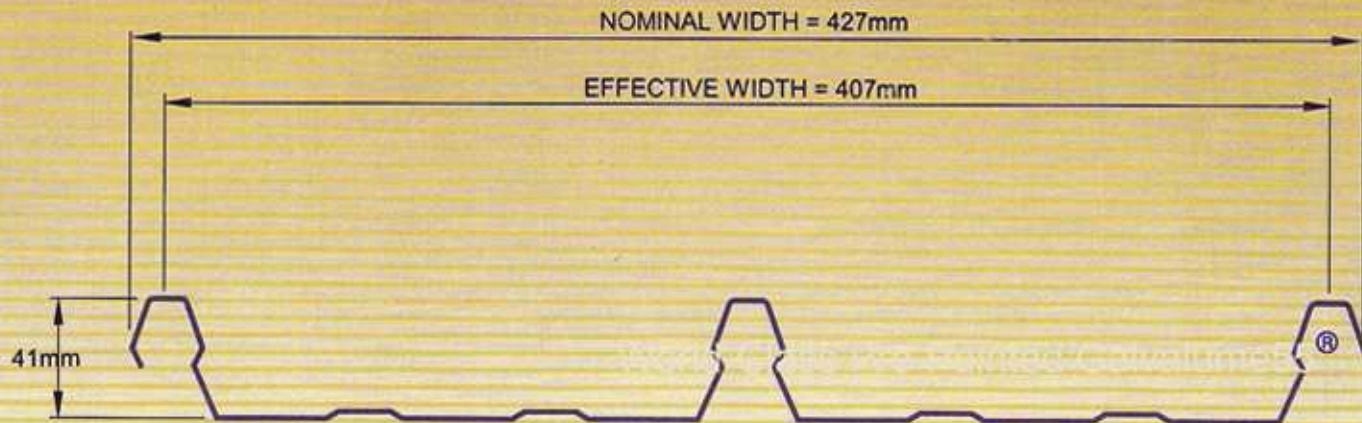
fastening system

No holes.
No leaks.
Guaranteed.



Color may vary from actual product

CROSS-SECTION



GENERAL PRODUCT INFORMATION

BASE METAL TYPE : Cold Rolled Steel; 275 MPa or 40,000 psi.

SUBSTRATE : GALVALUME 55™; Aluminum-Zinc alloy coated steel complying with ISO 9364. Also available in GALVABOND™; Lock Forming Quality (PNS 67: 1986)

PAINT COATING : STANDARD
Double oven-baked epoxy primer and regular polyester finish.

COATING

Top: Total of 25 microns
Finish Coat: 20 microns
Primer Coat: 5 microns
Bottom: Total of 10 microns
Backing Coat: 5 microns
Primer Coat: 5 microns

OPTIONAL

Premium Fluorocarbon (PVdF) paint finish on top of corrosion-resistant epoxy primer.

SALT SPRAY TEST RATING: Class 1000 hours (passed 1000 hours of continuous exposure as per PNS 201: 1990), the only pre-painted ribbed tray-type product in the market to have passed class 1000 rating.

AVAILABLE THICKNESSES: 0.50 mm to 0.60 mm

LENGTH: Available up to 15 m factory-cut custom lengths. Longer panels can be supplied provided satisfactory transport and on-site handling can be arranged.

ON-SITE ROLLFORMING CAN BE ARRANGED AT MINIMAL CHARGES

WIDTH :

Nominal Width	Effective Coverage
427 mm	407 mm

MINIMUM ROOF SLOPE: The elimination of end laps and the large drainage capacity of the wide, deep trays allows KLIP-LOK to be used on roofs with a fall as low as 5°. At this slope, KLIP-LOK can drain a rainfall intensity of 913mm/hr over a total run-off length, including stepped expansion joint of 40 m. On minimum slope applications, care must be taken that all the roofing supports are in the same plane, as variation could result in zero or negative fall and ponding on the roof.

APPLICATIONS: Roofing and Walling

STANDARD COLORS: Pacific Blue, Samar Beige, Spanish Red, Tile Red, Laguna White, and Baguio Green. Special colors are available upon request.

(THICKER ZINC AND PAINT COATINGS AS WELL AS LONGER SPANS CAN BE ARRANGED)

TECHNICAL NOTES

For average conditions in cyclonic areas the maximum allowable support spacings for Kliplok are as follows

Maximum Support Spacing

ROOF	End Spans	6'	(1800 mm)
	Internal Spans	6' 1/4"	(1900 mm)
	Stiffened Overhang	1'	(300 mm)

WALLS	Continuous Spans	6'6"	(2000 mm)
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Safe Load Tables

For conditions other than noted in the design criteria support spacings should be determined from the given

Loading Table

Notes:

1. Ability of sheeting to support installation and/or maintenance of roof traffic and wind load.
2. Ability to engage interlocking side laps during installation.
3. Wind loads have been determined in accordance with the revision of the "National Structural Codes of the Philippines for Buildings", Volume 1, 4th Edition.

No holes. No leaks. Guaranteed.

KLIPOK SECTION PROPERTIES

Thickness	Area		Ix		S _{TOP}		S _{BOT}		Y _{TOP}		Y _{BOT}	
	mm	mm ²	in. ²	mm ⁴	in. ⁴	mm ³	in. ³	mm ³	in. ³	mm	in.	mm
0.50	658.28	0.311	120371	0.088	3796	0.069	12957	0.241	31.71	1.25	9.29	0.37
0.60	789.93	0.373	144445	0.106	4562	0.085	15465	0.288	31.66	1.25	9.34	0.37

KLIPOK LOADING TABLE

0.50mm

SPAN BETWEEN SUPPORTS	mm	900	1050	1200	1350	1500	1650
LOAD	psf	128	94	72	56	46	38
DEFLECTION	in.	0.08	0.11	0.15	0.19	0.23	0.28
L / 240	psf	224	141	94	66	48	36
L / 360	psf	149	94	63	44	32	24

0.60mm

SPAN BETWEEN SUPPORTS	mm	900	1050	1200	1350	1500	1650	1800
LOAD	psf	155	114	87	69	56	46	38
DEFLECTION	in.	0.08	0.12	0.15	0.19	0.24	0.28	0.33
L / 240	psf	269	169	113	79	58	43	33
L / 360	psf	180	113	76	53	39	29	22

DESIGN CRITERIA

1. Steel grade is 40,000 psi

2. Section properties and Load Tables were computed in strict compliance with specifications of AISI.

3. Bending moment formulas used for flexural stress limitations is:

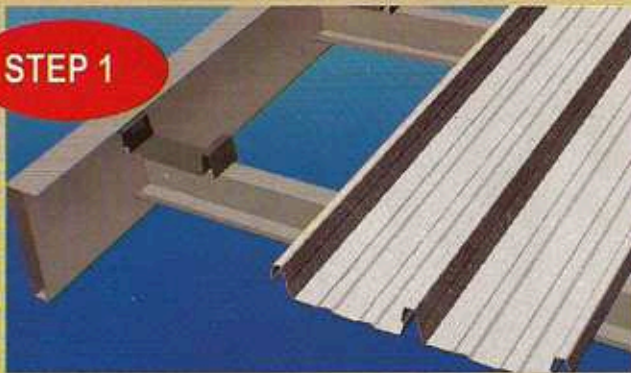
$$M = \frac{WL^2}{8}$$

4. Deflection Formula is $\delta = \frac{5WL^4}{384EI}$

5. Deflection Limitation $\Delta = \frac{L}{240}$

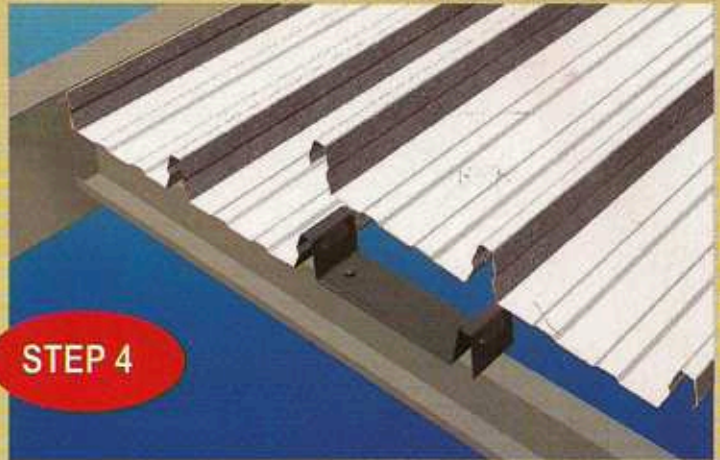
6. Minimum Yield Point : 40,000 psi
Allowable Design Stress: 24,000 psi

STEP 1



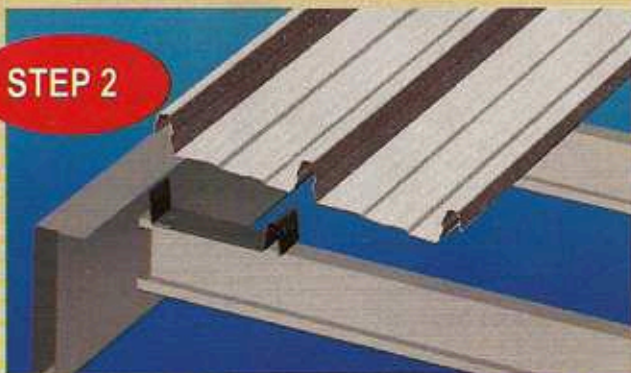
When lifting KLIP-LOK sheet lengths on to the roof frame ready for laying, make sure all sheets have the female rib facing towards the side where fastening is to commence. Attach the first run of fastening clips to the supports, using the appropriate fastening method and fasteners, and position them to fit into the female and center ribs of the first sheet. Make sure that the clips are in line and located so that the sheets will be laid correctly in relation to other building elements.

STEP 4



Lay the second sheet over the second run of fastening clips, again positioning the center rib first, and then push the female rib down over the male rib of the first or preceding sheet. Take care that the ends of the sheets are in line.

STEP 2



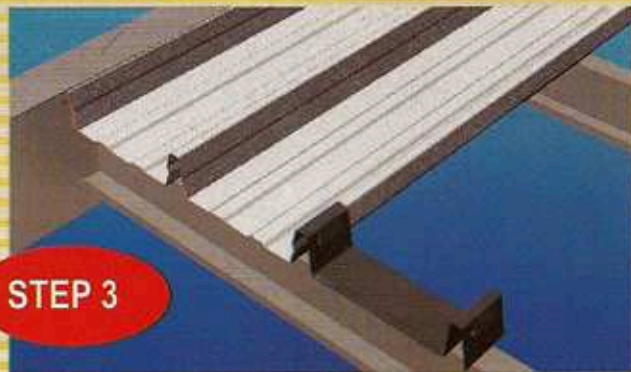
Place the first sheet over the fastened run of clips by positioning the center rib first, and seat the center and female ribs on to all clips pressing down the center rib and then the female rib over each fastening clip along the full length of the deck. When positioning this sheets make sure the overhang at each end is correct. When moving about on KLIP-LOK roofs, walk in trays.

STEP 5



If the space left between the last sheet and the fascia is less than the half of a sheet width, it will be covered by the fascia capping. In this case, cut fastening clips to two and using the short leg half, secure the male rib at each purlin. If the space left between the last sheet and the fascia is more than half a sheet width, the sheet to be placed should be cut to the width required and placed as for step 3 and 4.

STEP 3



Position the short leg of the fastening clip over the male rib of the fastened sheet and, using appropriate fasteners secure the clip to the purlin.