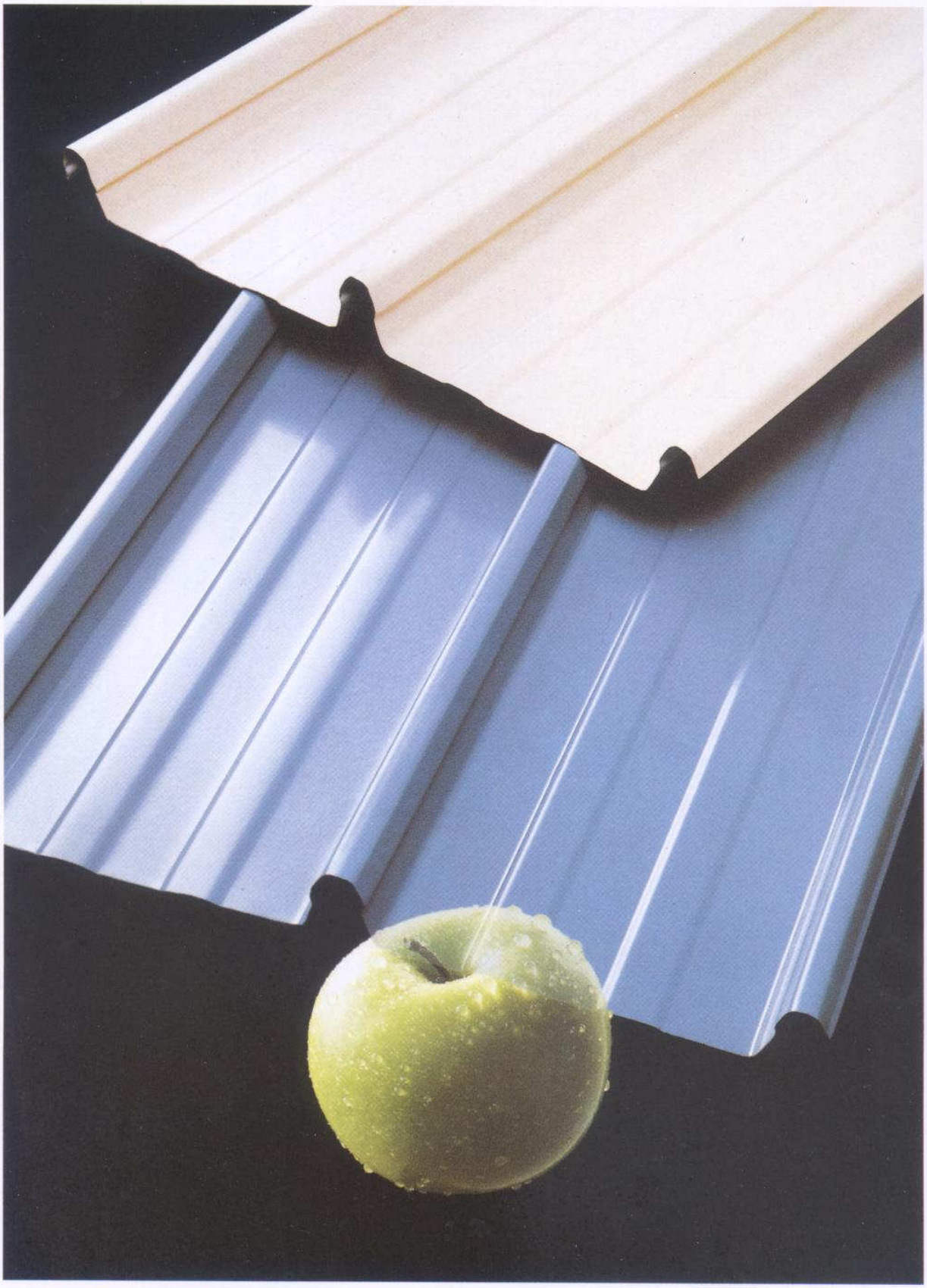
Sanko

GRIP DECK




ROHM-WAKO (MALAYSIA) SDN. BHD.

FEATURES & SPECIFICATIONS

AVAILABLE IN KOLORSTEEL & GALVANIZED STEEL

MATERIAL:
As a standard, GRIP DECK is made from either high tensile or commercial quality corrosion resistant galvanized steel.

AVAILABLE FINISH:
Either in KOLORSTEEL, plain galvanized steel or other coating types.

DIMENSIONS

Length:

Because GRIP DECK is roll formed from selected quality coils, GRIP DECK sheets can be made to any length required limited only by the maximum transportable length of 25m.

However, with sufficient quantity, SANKO's ultra modern machines allow GRIP DECK to be roll formed on-site.

GRIP DECK on-site forming has the following advantages over other roofing:–

(1) Continuous lengths of sheets from ridge to eave with no end laps.
(2) No leaks at end laps.
(3) No end laps wastage.
(4) Factory fresh sheets with no damages due to multiple handling.

Width:
Effective cover – 406 mm

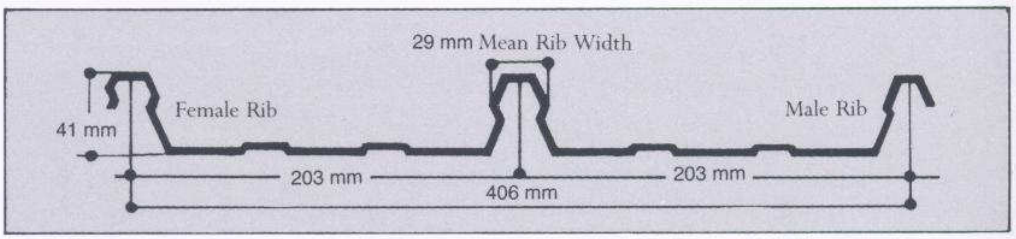
Rib Height:
41 mm

WEIGHT

Base Steel Thickness(mm)	kg/m	kg/m^2	m^2 per metric ton
0.48 E	2.38	5.86	170.30
*0.60	2.93	7.22	138.40

**On Application only.*
E = High Tensile Steel (550 mpa)

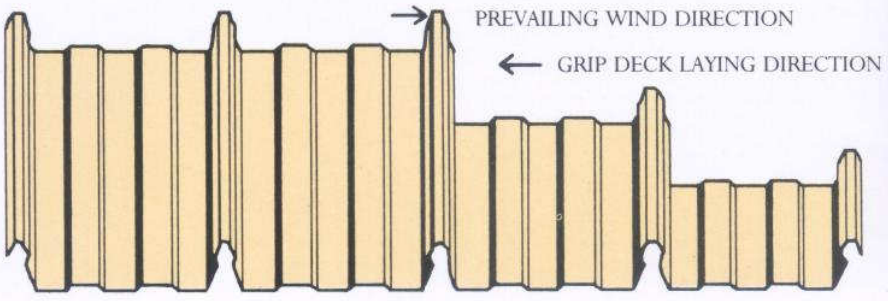
PANEL SECTION



INSTALLATION

GRIP DECK LAYING PROCEDURE
It is always advisable to lay sheets with side laps facing away from the direction of prevailing winds.

GRIP DECK can be fixed to both steel and timber purlins. There should be one fixing strap per sheet at every purlin.



INSTALLATION

FIXING OF STRAPS TO TIMBER PURLIN

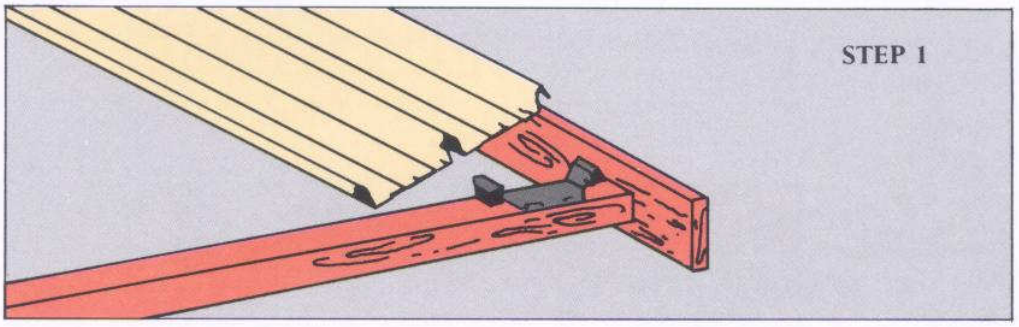
Wafer Head 10 x 25mm screws.

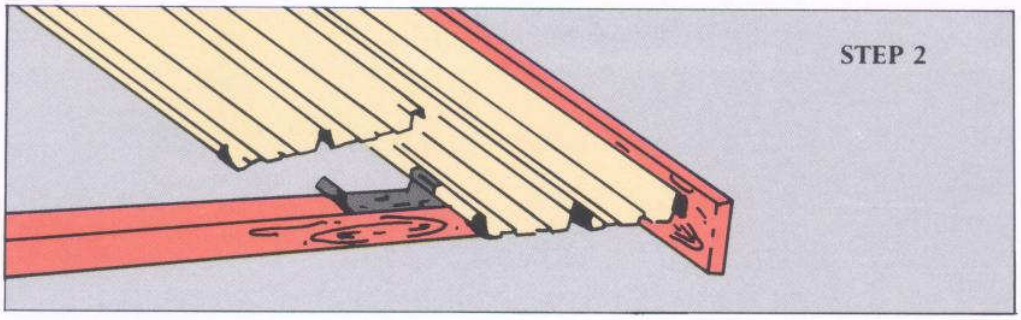
FIXING OF STRAPS TO STEEL PURLIN

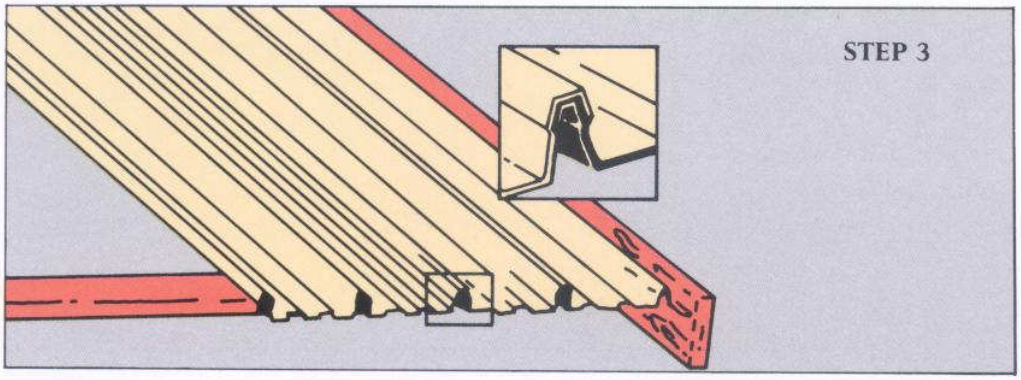
Without insulation – wafer Head 10 x 16 mm self drilling & tapping screws. With insulation – wafer head 10 x 22 mm self drilling & tapping screws.

When welding, make sure there is no weld build up to obstruct the clipping of the sheets. As GRIP DECK is a concealed fixing profile, it is imperative that the fixing straps are accurately aligned in order to achieve a positive lock. The first sheet is positioned to allow for sufficient overhang on the ridge and eave ends and then pressed over the straps until a 'click' is heard to indicate that a full lock is achieved.

The second and consecutive sheets are laid each time after a new set of fixing straps is placed firmly over the male rib of the preceding sheet. Locking of the sheets is not complete until the full side of the male rib clips firmly into the shoulder of the female rib.

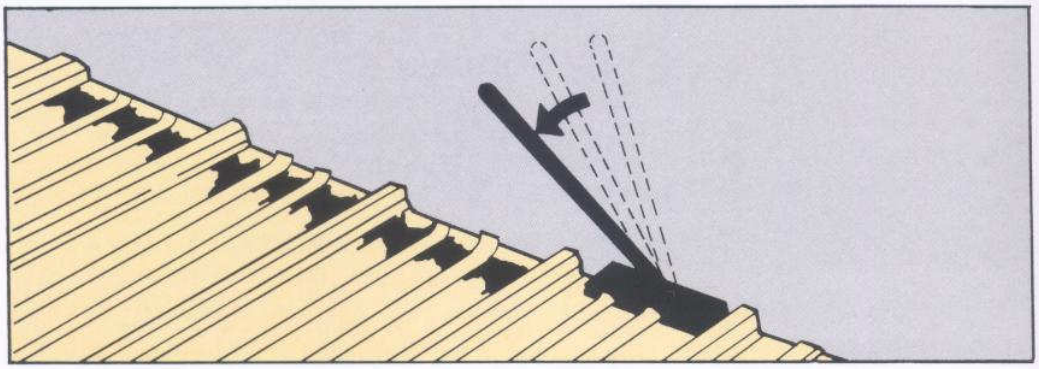




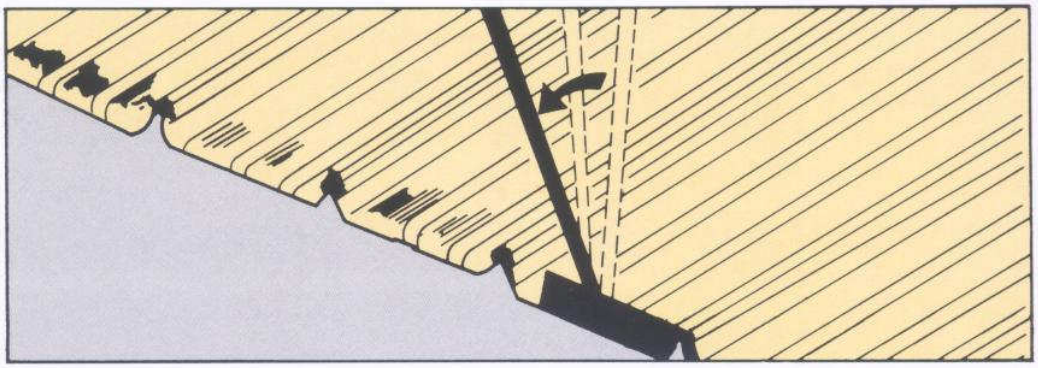


INSTALLATION

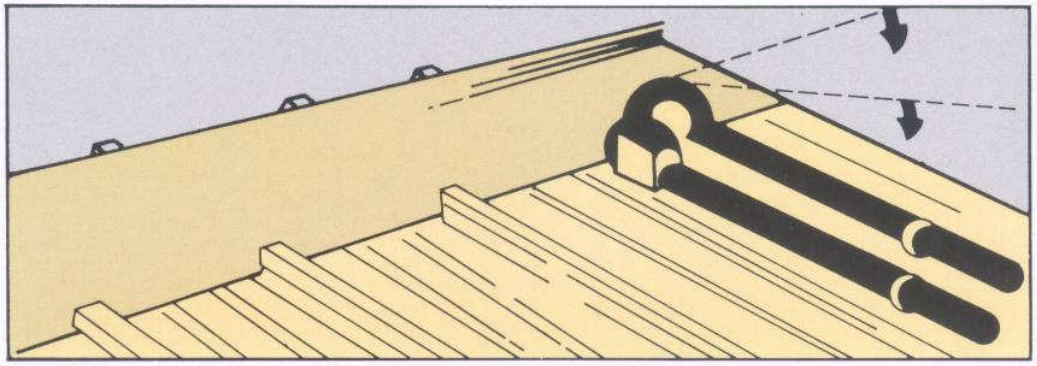
TURN-UP EDGE
Irrespective of roof slopes, it is compulsory to turn up the edges of the sheets at the top end. This will serve as a shield to any possible back splash of water into the building. A turn-up tool is available on request.



TURN-DOWN EDGE – (Turn down slightly)
As with the turn-up edge, a turn down tool is available to turn down the edge of the sheets which hang into the gutter so that the water run-off is complete and does not creep back into the building on the underside.



NOTCH EDGE – Optional
This is achieved with a special notching tool which, apart from preventing water entrance from the direct drive of the rain, also provides an aesthetically better finish to flashing and capping lines. Notching is better done on-site after installation of the flashing and capping pieces.



INSTALLATION

ROOF PITCH

GRIP DECK can be used on a minimum roof pitch of 1°. However, when designing, it is better to allow for a roof pitch of 2° in order to avoid possible ponding.

ROOF PURLIN AND GIRT

Distributed Load Capacity of Grip Deck over Continuous Bean.

SPAN (m) \ Thickness (mm)		0.48E	0.60
0.9	Safe Load (kg/m^2)	910	1170
	Deflection for above load (mm)	3.0	2.9
1.2	Safe Load (kg/m^2)	512	662
	Deflection for above load (mm)	5.3	5.3
1.5	Safe Load (kg/m^2)	327	428
	Deflection for above load (mm)	8.2	8.0
1.8	Safe Load (kg/m^2)	227	295
	Deflection for above load (mm)	11.8	11.4
2.1	Safe Load (kg/m^2)	167	214
	Deflection for above load (mm)	16.1	15.4
2.4	Safe Load (kg/m^2)	128	163
	Deflection for above load (mm)	21.0	20.0

Maximum Recommended Spacing of Supports						
Thickness (mm)	ROOF			WALL		
	Single Span (mm)	End Span (mm)	Internal Span (mm)	Single Span (mm)	End Span (mm)	Internal Span (mm)
0.48 E	1500	1800	2100	2300	2700	2900
0.60	2000	2300	2700	2500	2900	3000

END LAPS

All SANKO profiles are available in continuous lengths and where quantities are sufficient, they can be formed on-site to give continuous lengths as long as are required.

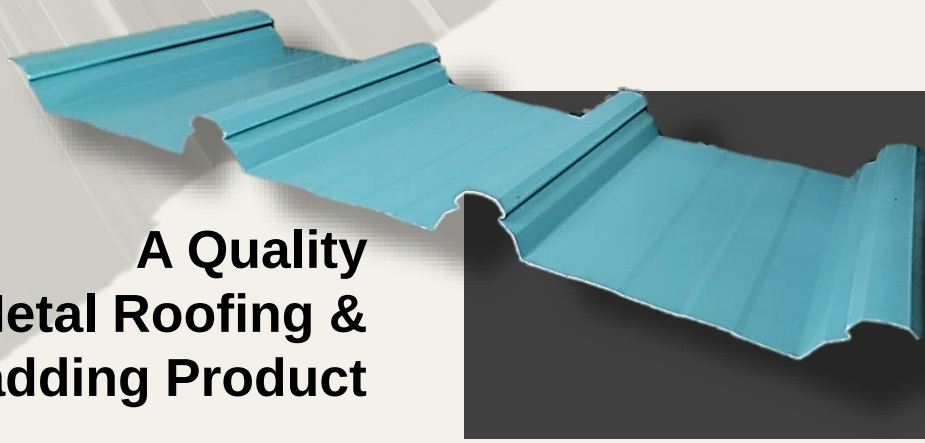
However, sometimes either because of transport limitations or insufficient quantities, long continuous lengths are not possible. End laps will then have to be used.

For roof pitches below 5°, minimum nine inches end laps. Roof pitches above 5°, minimum six inches end laps.

All end laps should be treated with sealants.

SANKO GRIP DECK® 3-PAN-W714

Swissma
BUILDING TECHNOLOGIES SDN. BHD.



A Quality Metal Roofing & Cladding Product

Available in COLORBOND® steel, ZINCALUME® steel, PRIMAMAJU® steel and other types of coating or other materials.

- **Application:**
  For all types of buildings (industrial, commercial or residential.
- **Special Features:**
  Concealed fixing with no puncture on roof surface hence no leakages through punctures by screws. Can cater to very low roof pitch.
- **Special On-Site Forming:**
  For lengths exceeding the permissible normal transportation, roofing profile can be formed at site to eliminate end lapping.
- **Easy Installation:**
  Secured via standard fixing straps with self-drilling screws.

SANKO GRIP DECK® 3-PAN-W714

SELF-WEIGHT

THICKNESS (BST) mm	kg/m	kg/m²
0.42E	3.10	4.63
0.48E	3.53	5.26
0.60E	4.37	6.53

Effective Width : 714mm
Rib Height : 39mm
Minimum Roof Pitch : 1°

DISTRIBUTED LOAD CAPACITY OVER CONTINUOUS BEAM

SPAN (m)	THICKNESS (BST) mm	0.42 'E'	0.48 'E'	0.60 'E'
1.2	Safe Load (kg/m²) Deflection for above load (mm)	580 4	662 4	828 4
1.5	Safe Load (kg/m²) Deflection for above load (mm)	371 6	424 6	530 6
1.8	Safe Load (kg/m²) Deflection for above load (mm)	258 9	294 9	368 9
2.1	Safe Load (kg/m²) Deflection for above load (mm)	189 12	216 12	270 12
2.4	Safe Load (kg/m²) Deflection for above load (mm)	145 16	166 16	207 16
2.7	Safe Load (kg/m²) Deflection for above load (mm)	114 20	131 20	164 20
3.0	Safe Load (kg/m²) Deflection for above load (mm)	93 25	106 25	132 25
3.5	Safe Load (kg/m²) Deflection for above load (mm)	68 34	78 34	97 34

MAXIMUM RECOMMENDED SUPPORT SPACING

THICKNESS (BST) mm	ROOF			WALL			FREE CANTILEVER (mm)
	SINGLE SPAN (mm)	END SPAN (mm)	INTERNAL SPAN (mm)	SINGLE SPAN (mm)	END SPAN (mm)	INTERNAL SPAN (mm)	
0.42E	1500	1650	2000	1900	2200	2400	300
0.48E	1600	1800	2200	2200	2400	2900	400
0.60E	2000	2300	2700	2300	2600	3000	400

NOTE: E = High Tensile Steel (550 mpa)
BST = Base Steel Thickness

Installation Method

Laying Procedure
It is always advisable to lay sheets with side laps facing away from the direction of prevailing winds.

End Laps
End lapping is not recommended to avoid puncturing the roof. However, if it is required, kindly contact us for advice.

Turn-Up Edge
Irrespective of roof slopes, it is compulsory to turn up the edges of the sheets at the top end. This will act as a shield to any possible back splash of water into the building.

Swissma
BUILDING TECHNOLOGIES SDN. BHD.

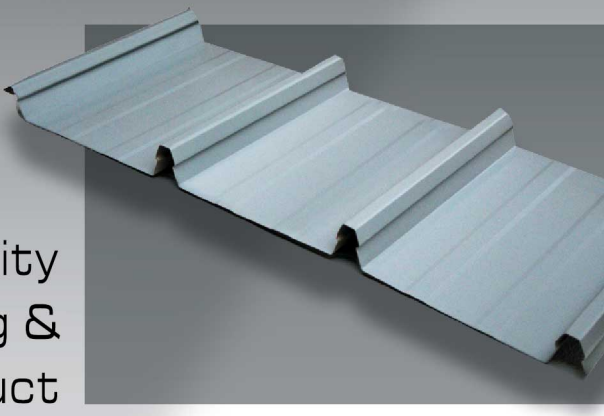
For enquiries, please contact:
Swissma Building Technologies Sdn Bhd (199701028820)
No. 23 (Lot 194),
Persiaran Selangor,
Seksyen 15,
40200 Shah Alam,
Selangor Darul Ehsan, Malaysia
Tel: 603-5519 1360
Fax: 603-5510 1362
Email: enquiry@swissma.com
Website: www.swissma.com.my

Manufactured by:
Associated Steel Industries (M) Sdn Bhd (197401001871)
(A Subsidiary of Swissma Building Technologies Sdn Bhd)

Distributed by:

GRIP DECK 3-PAN

Sanko



A Quality Metal Roofing & Cladding Product

clean Colorbond®

THERMATECH®

Zincalume®

PRIMA-R™ MAJU

Available in Clean COLORBOND® steel, Zincalume® steel, PRIMAMAJU-R™ steel and other type of surface coating or other materials.

- **Application:**
  For all types of buildings (industrial, commercial or residential).
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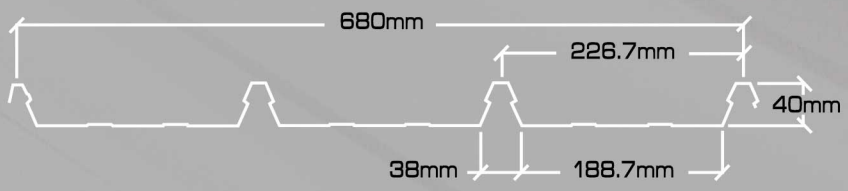
SANKO GRIP DECK 3-PAN



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Effective Width : 680mm
Rib Height : 40mm
Minimum Roof Pitch : 1°

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SPAN (m)	THICKNESS (BST) mm	0.42 'E'	0.48 'E'	0.60 'E'
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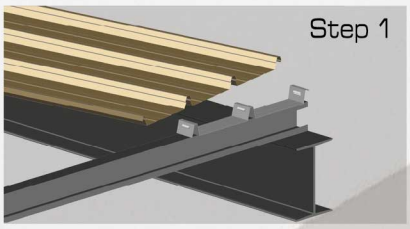

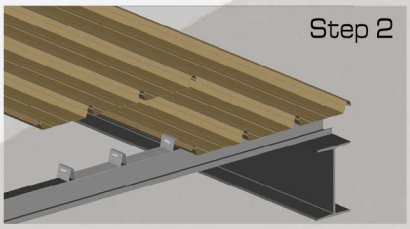

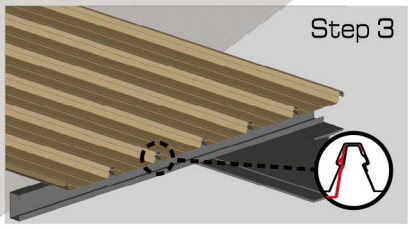

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Swissma
BUILDING TECHNOLOGIES SDN. BHD.
(444319-T)

For enquiries, please contact:
Swissma Building Technologies Sdn Bhd (444319-T)
Jalan Utas (15/7), Shah Alam Industrial Estate
P. O. Box 7053, 40700 Shah Alam
Selangor Darul Ehsan, Malaysia
Tel : (006) 03 5519 1360
Fax : (006) 03 5510 1362
Email : enquiry@swissma.com
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