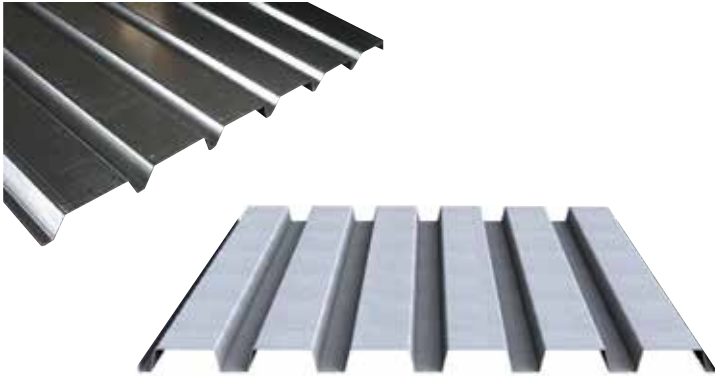


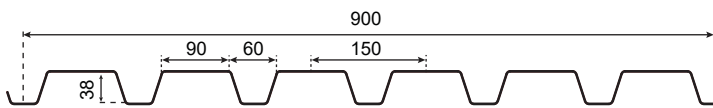


ASTEEL
GROUP

BV-DEK



PROFILE DIMENSION



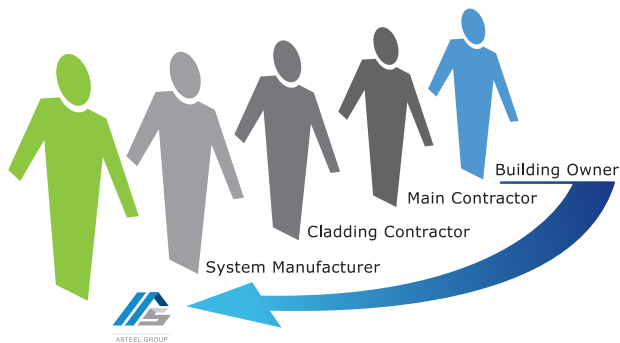
STEEL MATERIAL

envioSERIES pre-finished steel combines outstanding performance with unrivalled reliability and impressive sustainability credentials. The result of sustained evolution and revolutionary coating technology, the best product just got even better.

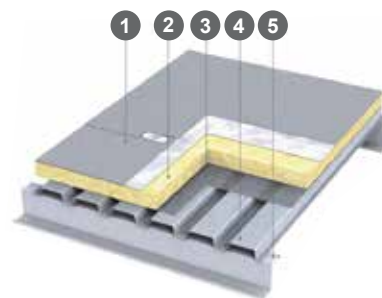
WARRANTY- Peace Of Mind

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The warranty guarantee is directly with the building owner meaning that in the case of a claim the contact of ASTEEL is direct rather than having to go through the supply chain, saving time, money and unnecessary responsibility avoidance by any parties.



MEMBRANE ROOF



- 1 Waterproof Membrane
- 2 Thermal Insulation
- 3 Vapour Barrier
- 4 ASTEEL BV-DEK
- 5 ASTEEL Galvanised Purlin

OUR MATERIAL BRAND

envioSHIELD®
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Silvery Trendy Steel



DESIGN
FLEXIBILITY



TERMITE
PROOF



WARRANTY



RECYCLING



IMPROVED
COATING



DURABILITY



ASTEEL GROUP
PRODUCT

DESIGN REQUIREMENT

Base Metal Thickness, BMT (mm)	Total Coated Thickness, TCT (mm)	Recommended Maximum Allowable Spacing Support				
		Roofs		Walls		Free Cantilever (mm)
		Single Span (mm)	Internal Span (mm)	Single Span (mm)	Internal Span (mm)	
0.42	0.50	1800	2000	2650	2900	1000
0.48	0.54	1900	2100	2800	3000	1100
0.54	0.60	1950	2200	2900	3200	1150

Based on death load 0.1 kN/m², live load 0.25kN/m², wind load 0.75kN/m²

INSTALLATION

- 1. Safety Precaution.** Impose highest safety awareness, protecting all parties from accident. Provide adequate personal protective equipment (PPE), fall arrestment tools and perimeter guardrails. Strictly adhere to all laws and practices that apply to your site.

2. Fixing to Support. BV-DEK profile is pierce-fixed to timber or steel supports. This means that fastener screws pass through the sheeting. You can place fasteners for BV-DEK through the crests or in the pans. To maximise water tightness, always place roof fasteners through the crests. For walling, you may use either crest or valley-fixing. Always drive the fasteners perpendicular to the sheeting, and in the centre of the rib. Don't place fasteners less than 25mm from the ends of sheets.

Valley Underline



Crest fixing for roof or walls



Self-Drilling Screw

Steel Panel

Steel Support
- 3. Side Lapping.** The side of BV-DEK with the anti-capillary groove is always the underlap. If end lapping is required, seek advice from our technical team on the sequence of laying and amount of overlap.

4. Check Alignment Periodically. Occasionally check that the sheets are still prallel with the first sheet, by taking two measurements across the width of the fixed sheeting. The string line can be used to ensure that the end of the roofing sheets is in line.

5. Turning Up and Clean Up. On all roofing less than 15°, the high end of all sheets must be turned up to stop water from being driven under the flashing and into the building.

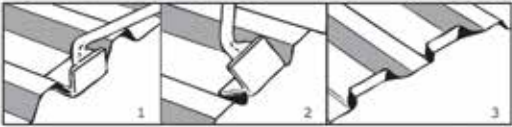
Underlap

Overlap

Crest: 4 fastenerst

Pan: 4 fastenerst

+ Fasteners per sheet per support. Most common practice is: 3 fasteners for internal spans and 4 fasteners for single end spans. S= side-lap
- 6. Cutting and Sealed Joints.** For cutting thin metal on site, we recommend cold cutting such as metal scissors or nibbler because it produces fewer damaging hot metal particles. Cut materials over the ground and not over the other materials. For sealed joints use screw or rivets and neutral-cure silicone sealant as suitable for use with TitanZinc, GaluZinc and Pre-finished Steel.



1 place stopend tool centrally in the pan.

2 lift up steadily until the end is vertical.

3 remove tool.

GENERAL NOTE: Oil Canning

Oil canning is an aesthetic issue, not a structural problem or a defect. It is unrealistic to expect any architectural roof or similar wide-metal element to be totally free of some degree of oil-canning. While oil canning cannot be totally eliminated, adherence to industry acceptance and recognized methods of design, metal specification, handling, fabrication, and installation can minimize its occurrence. Carefully attention to the causes of oil canning within all the phases of design and construction is the most effective way to reduce its occurrence.

THICKNESS

Application	Available Thickness (BMT) (mm)
Roofing	0.42, 0.50, 0.60, 0.75
Walling	0.42, 0.50, 0.60, 0.75
Membrane Underliner	0.60, 0.75

BV-DEK is a 900mm net coverage structural decking product. It can be produced in galvanised and painted steel. Acting as structural substrate, it can work together with rigid insulation and waterproof membrane to form the complete flexible waterproof roofing system; it also can transfer horizontal and vertical loads to the building frame in double-layer insulated metal roofing system to reduce purlin quantity.

STORAGE

If nestable profiles become wet while closely stacked, formation of wet storage stain or 'white rust' is inevitable. To minimise the possibility of inadvertent damage:

- a) Inspect deliveries on arrival. If moisture is present, individual sheets should be dried immediately with a clean rag and then stacked to allow air to circulate and complete the drying process.
- b) Well ventilated storage is essential. Always store metal products under cover in clean, well ventilated buildings.
- c) Cross stack or fillet sheets where outside storage is unavoidable and make provision for a fall to allow water to run off. Cover the sheets.

It is the responsibilities of the roofing contractor to avoid damaging the roof sheeting during its installation and fixing. Never drag sheets from pile. Remove by 'turning off' the stack. Lift sheets onto a roof, and do not drag over the eaves or the purlins. Use clean footwear. Remove swarf and other contaminants regularly.

DISTRIBUTE BY:

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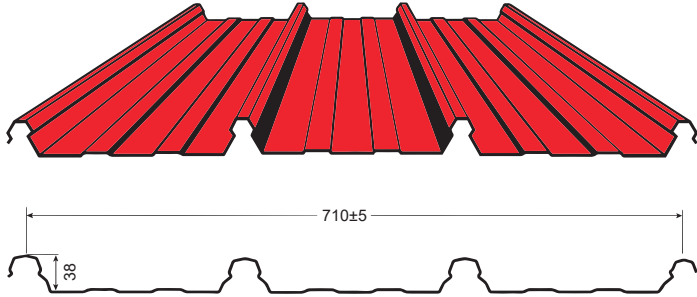
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ASTEEL
GROUP

LOKPRO-710

PROFILE DIMENSION



STEEL MATERIAL

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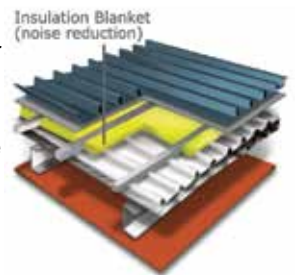
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ACOUSTIC ROOF

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OUR MATERIAL BRAND

envioMATT
Rough Matt Steel

envioPRIME
Prefinished Steel

envioClean
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Light Coated Steel

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Sheer Textured Steel

GALUZINC
Silvery Trendy Steel



DESIGN
FLEXIBILITY



TERMITE
PROOF



WARRANTY



RECYCLING



IMPROVED
COATING



DURABILITY



ASTEEL GROUP
PRODUCT

DESIGN REQUIREMENT

Base Steel Thickness (mm)	Roof			Wall
	Continuous span	Single span	Max. Cantilever	Max. span
0.42	2000 mm	1500 mm	200 mm	2400 mm
0.48	2200 mm	1600 mm	200 mm	2800 mm

Computed on base steel thickness only									
Base steel thickness mm	Total coated thickness mm	Weight		Moment of Inertia (I)		Top section modulus (Z)		Bottom section modulus (Z)	
		kg/m ²	lb/ft ²	cm ⁴ /m	in ⁴ /ft	cm ³ /m	in ³ /ft	cm ³ /m	in ³ /ft
0.42	0.47	5.37	1.09	7.61	0.056	2.58	0.048	7.21	0.135
0.48	0.53	5.99	1.22	8.50	0.062	2.89	0.054	8.03	0.149

STORAGE

If nestable profiles become wet while closely stacked, formation of wet storage stain or "white rust" is inevitable.

To minimise the possibility of inadvertent damage:

- Inspect deliveries on arrival. If moisture is present, individual sheets should be dried immediately with a clean rag and then stacked to allow air to circulate and complete the drying process.
- Well ventilated storage is essential. Always store metal products under cover in clean, well ventilated buildings.
- Cross stack or fillet sheets where outside storage is unavoidable and make provision for a fall to allow water to run off. Cover the sheets.

It is the responsibilities of the roofing contractor to avoid damaging the roof sheeting during its installation and fixing. Never drag sheets from pile. Remove by 'turning off' the stack. Lift sheets onto a roof, and do not drag over the eaves or the purlins. Use clean footwear. Remove swarf and other contaminants regularly.

INSTALLATION

1. Safety Precaution

Impose highest safety awareness, protecting all parties from accident. Provide adequate personal protective equipment (PPE), fall arrestment tools and perimeter guardrails. Strictly adhere to all laws and practices that apply to your site.

4. Check Alignment Periodically

Occasionally check that the sheets are still parallel with the first sheet, by taking two measurements across the width of the fixed sheeting. The string line can be used to ensure that the end of the roofing sheets is in line.

2. Lockclip Fixing

The first run of Lokpro-710 have to be located and fastened, one onto each purlins, so that they will correctly engage in the female and centre ribs of the first sheeting when it is located over them. Align and fasten the remaining of the first run of Lokpro-710 using a string as a straight edge.

4. Check Alignment Periodically

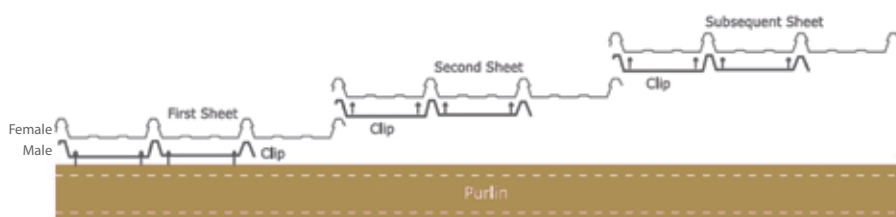
On all roofing less than 15, the high end of all sheets must be turned up to stop water from being driven under the flashing and into the building.

3. Fix The First and Subsequent Sheet

Locate the first sheeting over the fasten run of Lokpro-710, having fasten it longitudinal in relation to the eaves overhang and then fully engage on Lokpro-710 with foot pressure applied to the centre and female ribs over each Lokpro-710. Position the next run of Lokpro-710, one to each purlins engage over the male ribs of the installed sheet and fasten each Lokpro-710 with the recommended wafer head fasteners.

Place the second sheet over the second run of Lokpro-710 with the female rib overlapping the male rib of the first preceding sheet and the centre rib over the centre rib u-stand of the clips.

A distinct 'cluck' will be heard as the spurs along the edge of the male ribs snap into the shoulder along the female ribs.



Identification of Fastener
the format of the number code is:

10 - 16 x 22
Screw gauge (Thread outside diameter) Thread pitch (Thread per inch) Overall length of the screw measured from under the head (mm)

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KLANG BRANCH

Factory

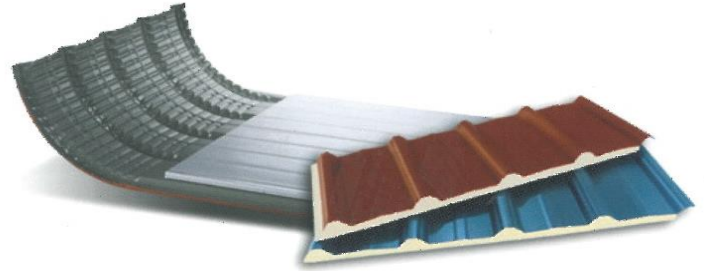
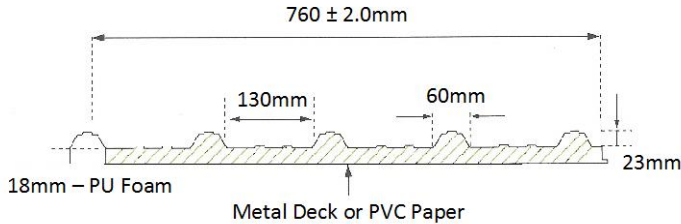
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42000 Pelabuhan Klang, Selangor.

TEL +6013-207 6899

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PROFILE DIMENSION



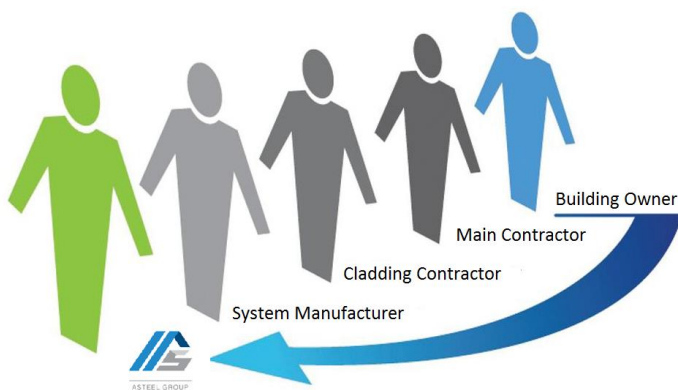
STEEL MATERIAL

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WARRANTY – Peace Of Mind

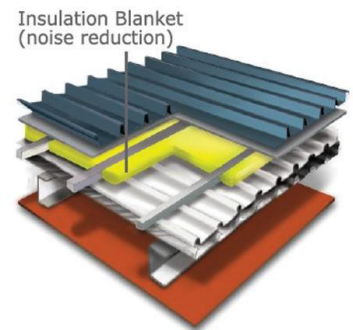
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ACOUSTIC ROOF

Composite steel/polymer sheets forming a sandwich structure offer a compact solution that also provides the roof with sound insulation properties. They reduce the impact noise from rain or hail, ensuring a highest standard of interior comfort.



OUR MATERIAL BRAND

envioMATT
Rough Matt Steel

envioPRIME
Prefinished Steel

envioClean
Self Cleaning Steel

envioKool
Light Coated Steel

envioTEX
Sheer Textured Steel

GALUZINC
Silvery Trendy Steel



DESIGN REQUIREMENT

ASTEEL PU DECK is the state of art technology made up of 3 layers of pre-finished steel sheets, rigid polyurethane foam and PVC/Metal deck lamination. It is complete insulation system build into a single product which can effectively reduce heat and noises.

Max. Allowable Spacing Support					
Thickness (mm)	Roofs		Walls		Max. Overhang Unsupported (mm)
	Internal Span (mm)	End Span (mm)	Internal Span (mm)	End Span (mm)	
0.42	1850	1600	2150	1900	150
0.35	1850	1400	1900	1800	150
0.30	1850	900	1800	1600	120

Test Items	Usable Temp	Heat Conductivity	Modulus of Elasticity	Bending Solidity	Density
Results	-196 degree	0.0166 Kcal/mh0c	20 kg/cm	2.0 ~ 2.2 kg/cm	30kg/m ³

STORAGE

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INSTALLATION

- Safety Percaution.** Impose highest safety awareness, protecting all parties from accident. Provide adequate personal protective equipment (PPE), fall arrestment tolls and perimeter guardrails. Strictly adhere to all laws and practices that apply to your site.
- Fixing to Support.** PU Deck profile is pierce-fixed to timber or steel supports. This mean that fastener screws pass through the sheeting. You can place fasteners for PU Deck through the crests or in the pans. To maximise water tightness, always place roof fasteners through the crests. For walling, you may use either crest or valley-fixing. Always drive the fasteners perpendicular to the sheeting, and in the centre of the rib. Don't place fasteners less than 25mm from the end of sheets.

Valley fixing for walls only

Crest fixing for roof or walls



Top Threaded section: extrudes sheeting towards the seal to maximize waterproofness Grips the sheeting for a secure connection. Stops sheeting from moving when walked on.

Dwell section: prevents the sheeting from riding up during fixing and minimize distortion of the profile.

Shank hole enlarge: enlarges the hole in the sheeting to minimize damage to the protective coating on the screw.

Identification of screw.

12 -	14 x	75
Screw gauge (thread outside diameter number in bracket is metric equivalent)	Thread pitch (threads per inch)	Overall length of the screw measured from under the head (mm)

- Side Lapping.** The side of PU Deck with the anti-capillary groove is always the underlap. If end lapping is required, seek advice from our technical team on the sequence of laying and amount of overlap.



+ Fasteners per sheet per support.
Most common practice is:
3 fasteners for internal spans and 4 fasteners for single end spans.
S = side-lap

- Check Alignment Periodically.** Occasionally check that the sheets are still prallel with the first sheet, by taking two measurements across the width of the fixed sheeting. The string line can be used to ensure that the end of the roofing sheets is in line.
- Turning Up and Clean Up.** On all roofing less than 15°, the high end of all shets must be turned up to stop water from being driven under the flashing and into the building.
- Cutting and Sealed Joints.** For cutting thin metal on site, we recommednd cold cutting such as metal scissors or nibbler because it products fewer damaging hot metal particles. Cut materials over the ground and not over the other materials. For sealed joints use screw or rivets and neutral-cure silicone as suitable for use with TitanZinc, GaluZinc and Pre-finished Steel.

ASTEEL SDN BHD (393042-D)

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Tel: 013-207 9812

Email: enquiries@asteel.com.my

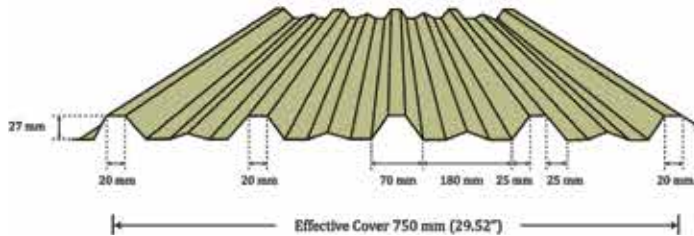
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ASTEEL
GROUP

STAR DECK

PROFILE DIMENSION



STEEL MATERIAL

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The result of sustained evolution and revolutionary coating technology, the best product just got even better.

WARRANTY- Peace Of Mind

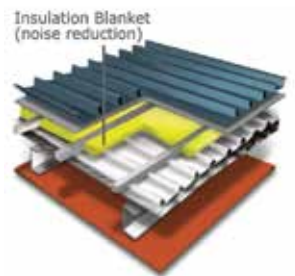
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DESIGN
FLEXIBILITY



TERMITE
PROOF



WARRANTY



RECYCLING



IMPROVED
COATING



DURABILITY



ASTEEL GROUP
PRODUCT

DESIGN REQUIREMENT

Rainfall Intensity (mm/ hour)	Roof Slope				
	1 in 29 (2°)	1 in 20 (3°)	1 in 12 (5°)	1 in 7.5 (7.5°)	1 in 6 (10°)
200	N.R.	36	42	48	52
250	N.R.	29	33	38	42
300	N.R.	25	28	31	35
400	N.R.	18	21	24	26

Max. Allowable Spacing Support							
Thickness (mm)	Roofs			Walls			Free Canti- lever (mm)
	Single Span (mm)	End Span (mm)	Internal Span (mm)	Single Span (mm)	End Span (mm)	Internal Span (mm)	
0.42	1200	1350	1700	1500	1650	2000	150
0.48	1350	1500	1850	1650	1800	2150	175
0.60	1600	1800	2100	1800	2000	2300	200

INSTALLATION

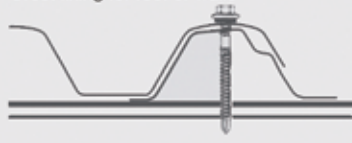
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Crest fixing for roof or walls



Top threaded section: extrudes sheeting towards the seal to maximise waterproofness. Grips the sheeting for a secure connection. Stops sheeting from moving when walked on.

Dwell section: prevents the sheeting from riding up during fixing and minimise distortion of the profile.

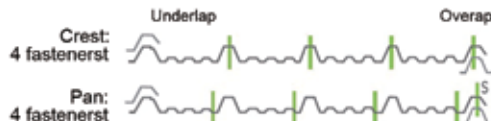
Shank hole enlarger: enlarges the hole in the sheeting to minimise damage to the protective coating on the screw.

Identification of screws. The format of the number code is

12 - 14 x 50
Screw gauge (thread outside diameter number in brackets is metric equivalent) Thread pitch (threads per inch) Overall length of the screw measured from under the head (mm)

Fasteners must have a coating system to meet AS3566 Class 3 or Class 4.

3. Side Lapping. The side of Star Deck with the anti-capillary groove is always the underlap. If end lapping is required, seek advice from our technical team on the sequence of laying and amount of overlap.



+ Fasteners per sheet per support.
Most common practice is:
3 fasteners for internal spans and
4 fasteners for single end spans.
S= side-lap

4. Check Alignment Periodically. Occasionally check that the sheets are still parallel with the first sheet, by taking two measurements across the width of the fixed sheeting. The string line can be used to ensure that the end of the roofing sheets is in line.

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1 place stopend tool centrally in the pan.
2 lift up steadily until the end is vertical.
3 remove tool.

6. Cutting and Sealed Joints. For cutting thin metal on site, we recommend cold cutting such as metal scissors or nibbler because it produces fewer damaging hot metal particles. Cut materials over the ground and not over the other materials. For sealed joints use screw or rivets and neutral-cure silicone sealant as suitable for use with TitanZinc, GaluZinc and Pre-finished Steel.

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ASTEEL SYNERGY SDN BHD (1359028-V)
KLANG BRANCH
Factory
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TEL +6013-207 6899

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STORAGE

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To minimise the possibility of inadvertent damage:

- Inspect deliveries on arrival. If moisture is present, individual sheets should be dried immediately with a clean rag and then stacked to allow air to circulate and complete the drying process.
- Well ventilated storage is essential. Always store metal products under cover in clean, well ventilated buildings.
- Cross stack or fillet sheets where outside storage is unavoidable and make provision for a fall to allow water to run off. Cover the sheets.

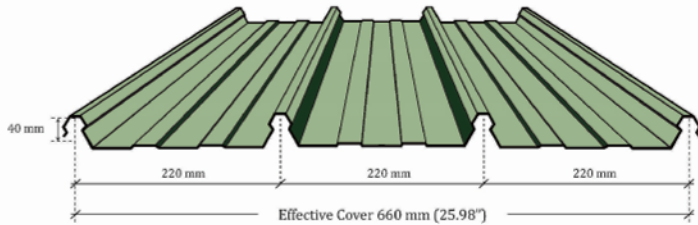
It is the responsibilities of the roofing contractor to avoid damaging the roof sheeting during its installation and fixing. Never drag sheets from pile. Remove by 'turning off' the stack. Lift sheets onto a roof, and do not drag over the eaves or the purlins. Use clean footwear. Remove swarf and other contaminants regularly.



ASTEEL
GROUP

STAR KLIP

PROFILE DIMENSION



STEEL MATERIAL

envioSERIES pre-finished steel combines outstanding performance with unrivalled reliability and impressive sustainability credentials. The result of sustained evolution and revolutionary coating technology, the best product just got even better.

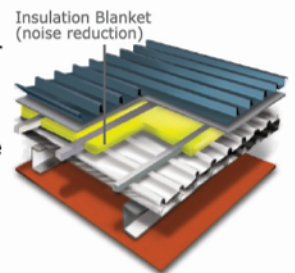
WARRANTY- Peace Of Mind

The warranty offered is most comprehensive guaranteed up to 30 years for pre-finished steel products. Dramatic and unrivalled improvements in colour stability and gloss retention are translated into a durable product with greater longevity. The warranty guarantee is directly with the building owner meaning that in the case of a claim the contact of ASTEEL is direct rather than having to go through the supply chain, saving time, money and unnecessary responsibility avoidance by any parties.



ACOUSTIC ROOF

Composite steel/ polymer sheets forming a sandwich structure offer a compact solution that also provides the roof with sound insulation properties. They reduce the impact noise from rain or hail, ensuring a highest standard of interior comfort.



OUR MATERIAL BRAND

envioMATT
Rough Matt Steel

envioPRIME
Prefinished Steel

envioClean
Self Cleaning Steel

envioKool
Light Coated Steel

envioTEX
Sheer Textured Steel

GALUZINC
Silvery Trendy Steel



DESIGN
FLEXIBILITY



TERMITE
PROOF



WARRANTY



RECYCLING



IMPROVED
COATING



DURABILITY



ASTEEL GROUP
PRODUCT

DESIGN REQUIREMENT

Base Steel Thickness (mm)	Roof			Wall
	Continuous span	Single span	Max. Cantilever	Max. span
0.42	2000 mm	1500 mm	200 mm	2400 mm
0.48	2200 mm	1600 mm	200 mm	2800 mm

Computed on base steel thickness only					
Base steel thickness mm	Total coated thickness mm	Weight kg/m ² , lb/ft ²	Moment of Inertia (I) cm ⁴ /m, in ⁴ /ft.	Top section modulus (Z) cm ³ /m, in ³ /ft.	Bottom section modulus (Z) cm ³ /m, in ³ /ft.
0.42	0.47	5.37 1.09	7.61 0.056	2.58 0.048	7.21 0.135
0.48	0.53	5.99 1.22	8.50 0.062	2.89 0.054	8.03 0.149

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INSTALLATION

1. Safety Percaution

Impose highest safety awareness, protecting all parties from accident. Provide adequate personal protective equipment (PPE), fall arrestment tools and perimeter guardrails. Strictly adhere to all laws and practices that apply to your site.

4. Check Alignment Periodically

Occasionally check that the sheets are still parallel with the first sheet, by taking two measurements across the width of the fixed sheeting. The string line can be used to ensure that the end of the roofing sheets is in line.

2. Lockclip Fixing

The first run of Star Klip have to be located and fastened, one onto each purlins, so that they will correctly engage in the female and centre ribs of the first sheeting when it is located over them. Align and fasten the remaining of the first run of Star Klip using a string as a straight edge.

4. Check Alignment Periodically

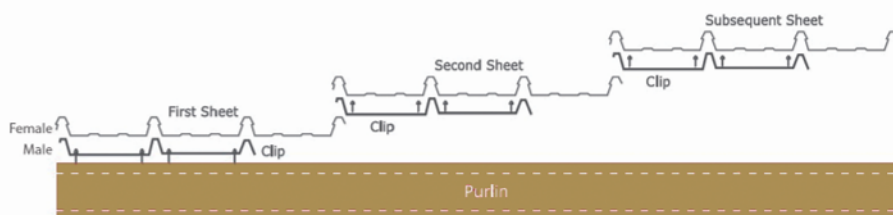
On al roofing less than 15 , the high end of all sheets must be turned up to stop water from being driven under the flashing and into the building.

3. Fix The First and Subsequent Sheet

Locate the first sheeting over the fasten run of Star Klip, having fasten it longitudinal in relation to the eaves overhang and then fully engage on Star Klip with foot pressure applied to the centre and female rubs over each Star Klip

Position the next run of Star Klip, one to each purlins engage over the male ribs of the installed sheet and fasten each Star Klip with the recommended wafer head fasteners.

Place the second sheet over the second run of Star Klip with the female rib overlapping the male rib of the first preceding sheet and the centre rib over the centre rib u-stand of the clips. A distinct 'cluck' will be heard as the spurs along the edge of the male ribs snap into the shoulder along the female ribs.



Identification of Fastener
the format of the number code is:

10 - 16 x 22
Screw gauge (Thread outside diameter) Thread pitch (Thread per inch) Overall length of the screw measured from under the head (mm)

GENERAL NOTE: OIL CANNING

Oil canning is an aesthetic issue, not a structural problem or a defect. It is unrealistic to expect any architectural roof or similar wide-metal element to be totally free of some degree of oil-canning. While oil canning cannot be totally eliminated, adherence to industry acceptance and recognized methods of design, metal specification, handling, fabrication, and installation can minimize its occurrence. Carefully attention to the causes of oil canning within all the phases of design and construction is the most effective way to reduce its occurrence.

ASTEEL SYNERGY SDN BHD (1359028-V)

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TEL +6013-207 6899

DISTRIBUTOR:

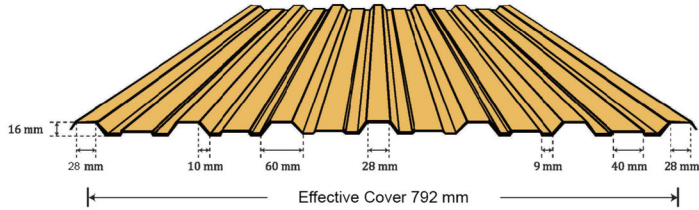
This brochure must not be reproduce or transmitted in any form either electronic, mechanical, photocopying, recording or otherwise without written consent from ASTEEL SYNERGY Sdn. Bhd.



ASTEEL
GROUP

W-DEK

PROFILE DIMENSION



STEEL MATERIAL

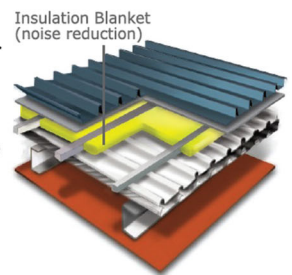
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FLEXIBILITY



TERMITE
PROOF



WARRANTY



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IMPROVED
COATING



DURABILITY



ASTEEL GROUP
PRODUCT

DESIGN REQUIREMENT

Base Steel Thickness (mm)	Wall		
	Continuous span	Single span	Max. Cantilever
0.42	1980 mm	1830 mm	100 mm

Material	Base steel thickness mm	Total coated thickness mm	Weight kg/m ² , lb/ft ²	Computed on base steel thickness only			
				Moment of Inertia (I) cm ⁴ /m, in ⁴ /ft.	Top section modulus (Z) cm ³ /m, in ³ /ft.	Bottom section modulus (Z) cm ³ /m, in ³ /ft.	
ShinePlus	0.42	0.47	4.32 0.887	2.12 0.016	2.10 0.039	3.60 0.067	
Spectra	0.42	0.47	4.24 0.870				

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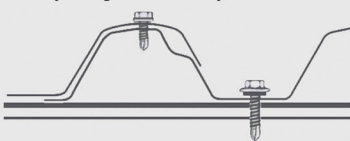
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INSTALLATION

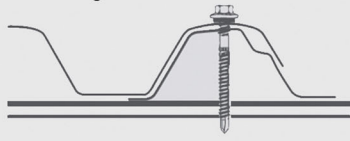
1. Safety Precaution. Impose highest safety awareness, protecting all parties from accident. Provide adequate personal protective equipment (PPE), fall arrestment tools and perimeter guardrails. Strictly adhere to all laws and practices that apply to your site.

2. Fixing to Support. W-Dek profile is pierce-fixed to timber or steel supports. This means that fastener screws pass through the steering. You can place fasteners for W-Dek through the crests or in the pans. To maximise water tightness, always place roof fastener through the crests. For walling, you may use either crest or valley-fixing. Always drive the fasteners perpendicular to the sheeting, and in the centre of the rib. Don't place fasteners less than 25mm from the ends of sheets.

Valley fixing for walls only



Crest fixing for roof or walls



Drill point
Standard metal

Top threaded section: extrudes sheeting towards the seal to maximise waterproofness. Grips the sheeting for a secure connection. Stops sheeting from moving when walked on.

Dwell section: prevents the sheeting from riding up during fixing and minimise distortion of the profile.

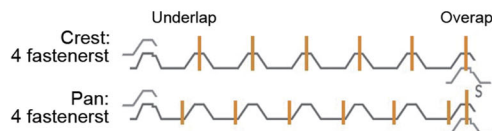
Shank hole enlarger: enlarges the hole in the sheeting to minimise damage to the protective coating on the screw.

Identification of screws. The format of the number code is

12 - **14** x **50**
Screw gauge (thread outside diameter number in brackets is metric equivalent) Thread pitch (threads per inch) Overall length of the screw measured from under the head (mm)

Fasteners must have a coating system to meet AS3566 Class 3 or Class 4.

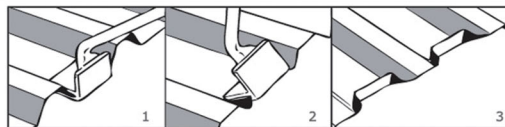
3. Side Lapping. The side of W-Dek with the anti-capillary groove is always the underlap. If end lapping is required, seek advice from our technical team on the sequence of laying and amount of overlap.



+ Fasteners per sheet per support.
Most common practice is:
3 fasteners for internal spans and
4 fasteners for single end spans.
S = side-lap

4. Check Alignment Periodically. Occasionally check that the sheets are still parallel with the first sheet, by taking two measurements across the width of the fixed sheeting. The string line can be used to ensure that the end of the roofing sheets is in line.

5. Turning Up and Clean Up. On all roofing less than 15°, the high end of all sheets must be turned up to stop water from being driven under the flashing and into the building.



- 1 place stop end tool centrally in the pan.
- 2 lift up steadily until the end is vertical.
- 3 remove tool.

6. Cutting and Sealed Joints. For cutting thin metal on site, we recommend cold cutting such as metal scissors or nibbler because it produces fewer damaging hot metal particles. Cut materials over the ground and not over the other materials. For sealed joints use screw or rivets and neutral-cure silicone sealant as suitable for use with TitanZinc, GaluZinc and Pre-finished Steel.

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