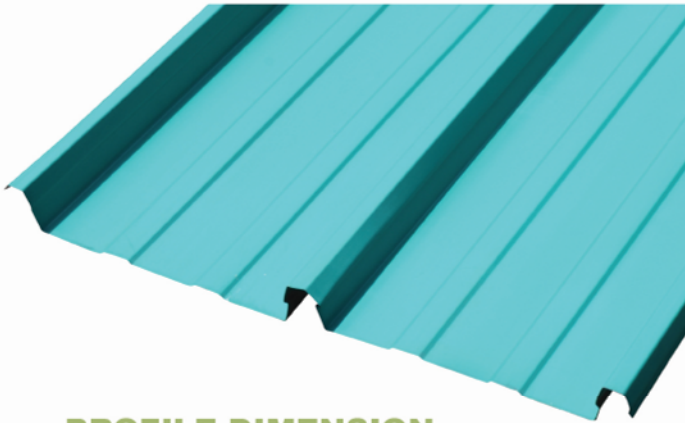


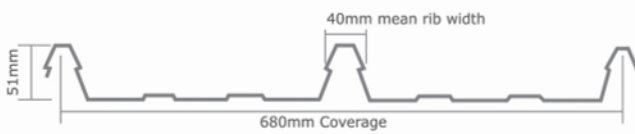


ASTEEL
GROUP

K-LOK



PROFILE DIMENSION

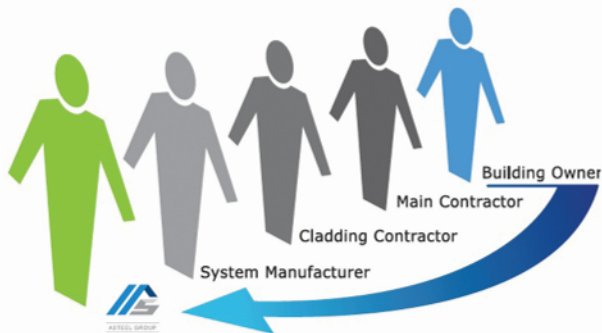


STEEL MATERIAL

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.



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



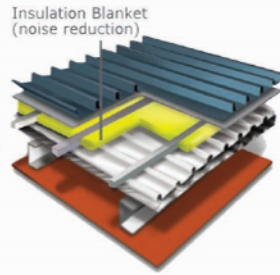
DURABILITY



ASTEEL GROUP
PRODUCT

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.



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°)
250	70	85	100	113	124
300	63	71	83	94	103
400	47	53	63	70	77
500	38	43	50	56	62

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	1500	1600	1750	1900	2200	2400	150
0.48	1600	1800	2000	2200	2400	2800	200
0.60	2000	2200	2400	2500	2600	3000	300

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

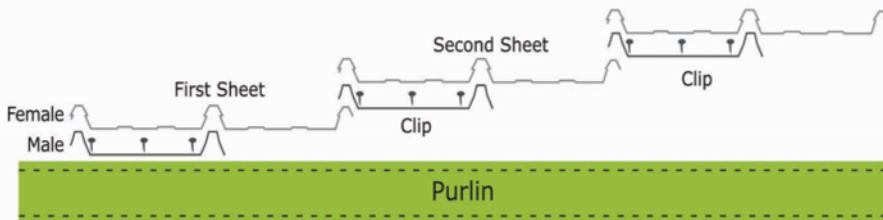
Occasionally check that the sheets are still parallel with the first sheet, by taking two measurements across the width of the fixed sheeting. The string line can be used to ensure that the end of the roofing sheets is in line.

2. Lockclip Fixing

The first run of LOKPROs 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 LOCKPROs 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.



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 (Sabah) SDN. BHD

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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

3. Fix The First and Subsequent Sheet

Locate the first sheeting over the fastener run of LOKPROs, having fasten it longitudinal in relation to the eaves overhang and then fully engage on LOKPROs with foot pressure applied to the centre and female ribs over each LOCKPROs.

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

Place the second sheet over the second run of LOKPROs 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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