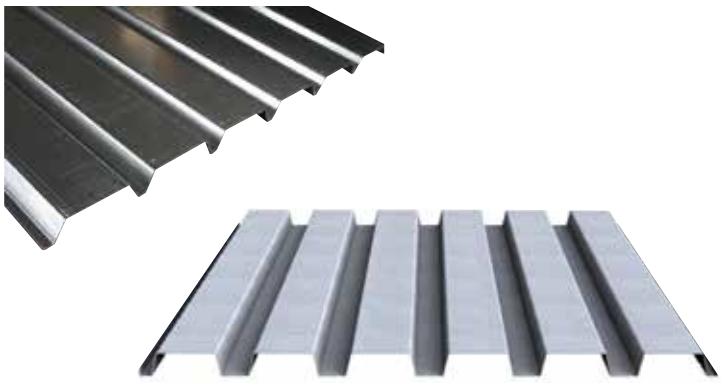
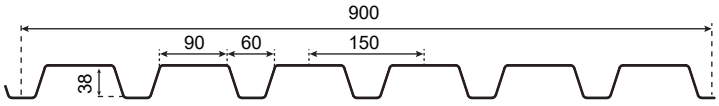
ASTEEL GROUP

BV-DEK



PROFILE DIMENSION



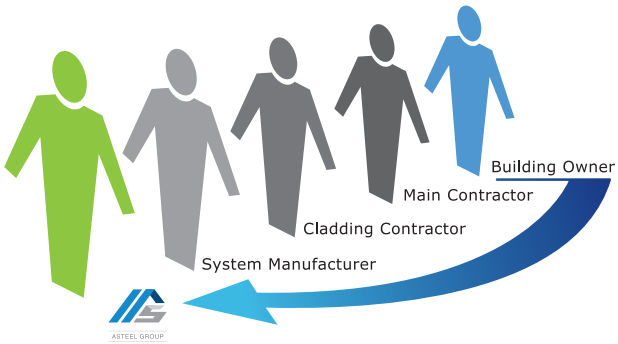
STEEL MATERIAL

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.

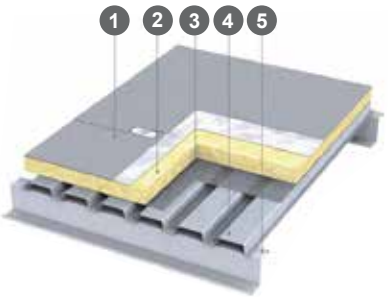
WARRANTY- Peace Of Mind

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.



MEMBRANE ROOF



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

OUR MATERIAL BRAND

envioSHIELD® Ultra Durable Steel
envioMATT® Rough Matt Steel
envioClean® Self Cleaning Steel
envioTEX® Sheer Textured Steel
envioPRIME® Prefinished Steel
GALUZINC® 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/m^2, live load 0.25kN/m^2, wind load 0.75kN/m^2

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 posibility 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 in unavoidable and make provision for a fall to allow water to run off. Cover the sheets.

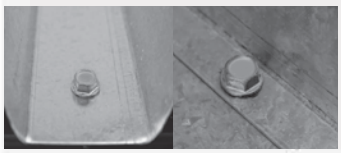
It is the responsibilities of the roofing contractor to avoid damaging the roof sheeting during its installation and fixing. Never drag sheets from pile. Remove by 'turning off' the stack. Lift sheets onto a roof, and do not drag over the eaves or the purlins. Use clean footwear. Remove swarf and other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

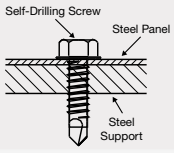
INSTALLATION

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.

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

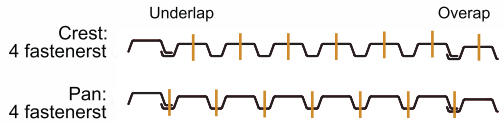
Top threaded section: extrudes sheeting towards the seal to maximise waterproofness. Grips the sheeting for a secure connection. Stops sheeting from moving when walked on.
Dwell section: prevents the sheeting from riding up during fixing and minimise distortion of the profile.
Shank hole enlarger: enlarges 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 brackers 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.

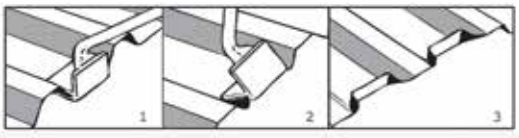
3. **Side Lapping.** The side of BV-DEK with the anti-capillary groove is always the underlap. If end lapping is required, seek advice from our technical team on the sequence of laying and amount of overlap.



+ 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 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.



1 place stopend tool centrally in the pan.
2 lift up steadily untill 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.

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 occurence.

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