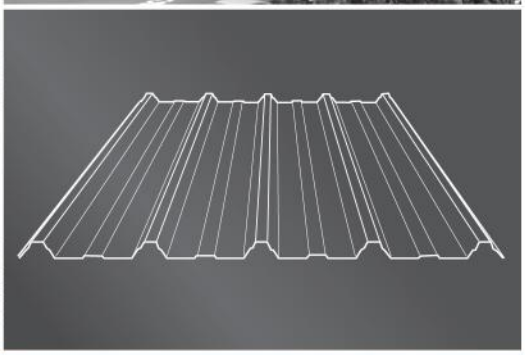
LSL METAL











COLOUR DECK

Features

- A high tensile 5 ribs cost effective roof decking profile which provides great spanning ability.
- A common profile, widely used in the tropical region.
- Suitable for both roof and wall cladding in industrial, commercial and domestic application.
- The manufacturing process is by means of continuous cold roll forming using high quality pre-painted steel coil.

Advantages

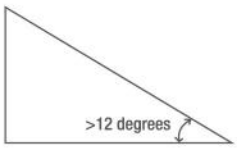
- **Cost Saving**
  High strength and profile rigidity enable wide-span support spacing; henceforth reduce structural framing cost.
- **Protection**
  Pre-coated oven baked steel coils in various paint coating system like Regular Polyester, Silicon Modify Polyester, PVF2 on GI or Galvalume treated coils provide great protection and durability against natural tropical weathering conditions.
- **Free Dented Problem**
  The center pan rib provides greater strength along the profile pan area and avoids denting problems especially when handling thinner materials.
- **Strength**
  High Ix (profile section properties) allow the use of wide support spacing and yet meet the design requirements for local wind loads design conditions.
- **Under Lapped Anti-leak Capillary:**
  The under lapped anti-leak capillary design of this profile prevents rain water entry during strong wind conditions.

Crimp Curve Colour Deck

COLOUR DECK can be curved by crimp curving process. It is available in both convex and concave shapes to provide versatility and creativity to building designs. The minimum radius of the curvature must be at least 450mm for convex and 550mm for concave to underside or pan of sheet.

Installation Guidelines

Roof Pitch



The minimum roof pitch design when using COLOUR DECK must be greater than 12 degrees.

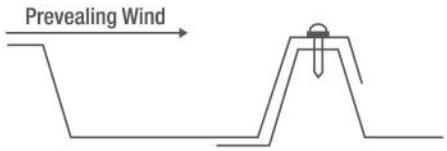
Recommended Fasteners

Recommended Specification :

- AS3566 Class 3 for roofing
- AS3566 Class 2 for cladding

	Crest Fixed	Valley Fixed
Steel framing (up to 5mm thickness)	No 12 x 45 Hex Head Self Drilling Tek with Neoprene washer	No 10 x 16 Hex Head Self Drilling Tek with Neoprene washer
Timber Framing (Hardwood)	No 12 x 65 Hex Head Type 17 Self Drilling Wood Screws with Neoprene washer.	No 12 x 40 Hex Head Type 17 Self Drilling Wood Screws with Neoprene washer.

Side Lap Fasteners



These are added at the mid-spans of the sheets for support spacing over 900mm for roofs and 1200mm for walls to ensure weatherproofing. Use No 8 x 12 Hex Head Type Self Drilling Screw with Neoprene washer or sealed with blind rivets.

Methods of Fixing Roofs

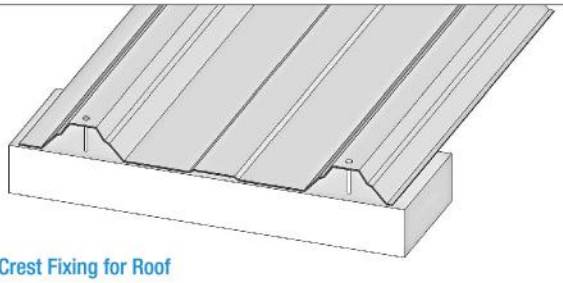
Pierce fix through crests using 1 fastener through every rib at every support (4 fasteners per sheet).

Walls – Crest fixing as for roofs or Valley fixing can be used.

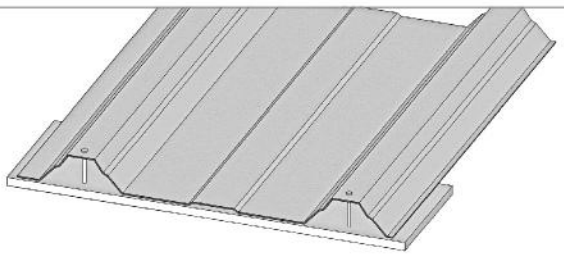
Valley fixing requires 1 fastener beside every rib at every support (4 fasteners per sheet). If valley fastening is used, side lap fasteners must be added beside each main fastener.

Fixing Detail

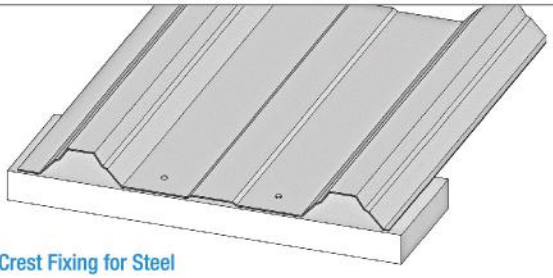
Fixing and Overlapping Details



Crest Fixing for Roof



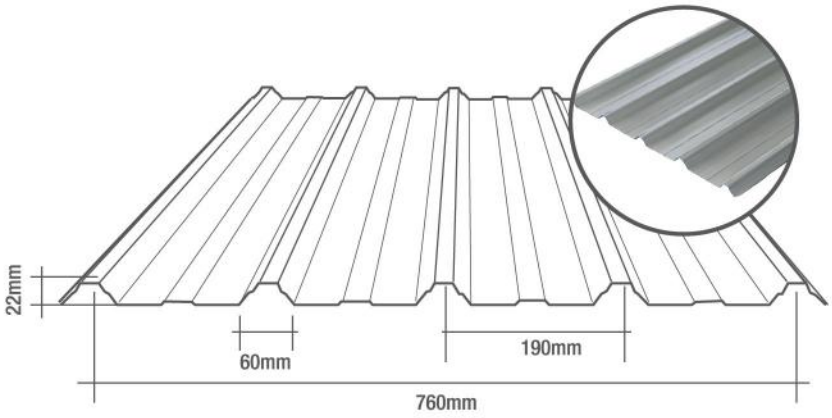
Valley Fixing for Wall Cladding



Crest Fixing for Steel

Technical Data and Information

Dimensions of **Colour DECK** Section



Total Coated Thickness (mm)	Width Coverage (mm)	Minimum Recommended Pitch	Roofs			Walls		
			Single	End	Internal	Single	End	Internal
0.32	750	12°	900	900	1000	1200	800	1400
0.36	750	12°	900	900	1200	1400	1000	1600
0.40	750	12°	1100	1100	1500	1500	1300	1800
0.47	750	12°	1100	1100	1700	1800	1800	2200

Structure Detail

Thickness (TCT) (mm)	I_1 mm^4	I_2 mm^4	Sc mm	St mm	A mm^2
0.32	16253750	21194	383	379	286.386
0.36	18752770	24447	383	379	322.185
0.40	21251790	27700	383	379	365.60
0.47	26249830	34207	383	379	451.036

Material Specifications

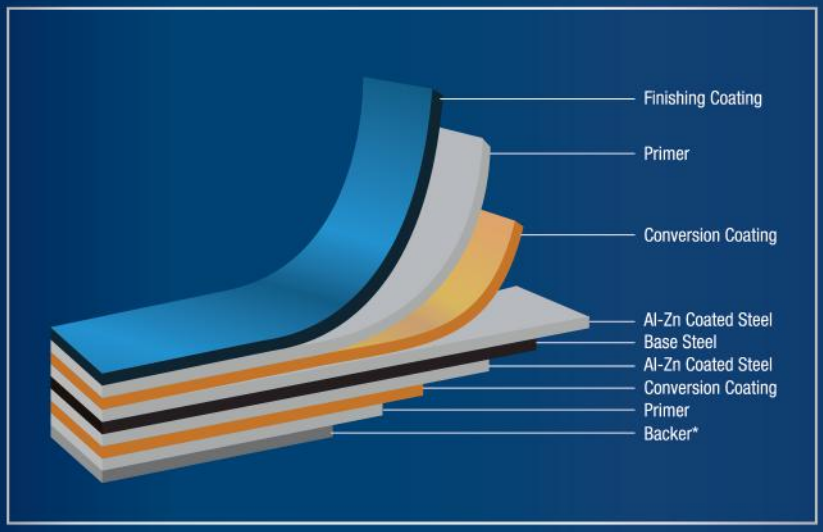
Materials used for **LSL Colour DECK** meet stringent tests such as tensile strength, QUV simulate, cyclic corrosion, QCT, gloss uniformly, T-bend, impact resistance and optical admission.

Base Metal Steel	:	Complies With JIS G3312; AS1397; MS1196
Minimum Tensile Strength	:	350 to 550 MPa
Base Steel Coating	:	Zinc Coated (Z18) or Aluminum Zinc 55% Coated (AZ150)
Primer Coat	:	Epoxy Finish (Top Coat)

Utilizing State-of-the-Art INFRA-RED Coating Technology, Our Paint System provides Ultimate Weathering Resistance with outstanding Colour Retention Durability:

SERIES	PAINT SYSTEM	WARRANTY	FEATURES
PREMIUM Series	Polyester Coated Paint System	5 Years Colour Warranty 10 Years Corrosion Warranty	Energy- Efficient Solar Reflective Finish meeting Energy Star standards and requirements. Environmental Friendly with Mercury and Lead-Free coatings
ELITE Series	100% High End Ceramic Polyester Paint	10 Years Colour Warranty 25 Years Corrosion Warranty	
PVDF Series	Poly Vinyl Fluoride (PVF2) Genuine 70% Full Strength Kynar 500® or Hylar 5000® Fluorocarbon Paint System	20 Years Colour Warranty 25 Years Corrosion Warranty	

Coating Specifications



	TOP		BACK	
	Primier	Finish	Primer	Backer
PREMIUM Series	5	15 -18	5	5
ELITE Series	5	18 - 20	5	5
PVDF Series	5	18 - 20	5	5

Unit: Microns µm

Solar Reflectivity (SR)

Solar reflectivity or reflectance is the ability of a material to reflect solar energy from its surface back into the atmosphere. The SR value is a number from 0 to 1.0. A value of 0 indicates that the material absorbs all solar energy and a value of 1.0 indicates total reflectance. Energy Star requires an initial SR value of 0.25 or higher for steep slope (>2:12) roofs and 0.15 or greater after three years. Low slope roofs require an initial SR value of 0.65 or higher and 0.50 or greater after three year.

Solar Reflectance Index (SRI)

The Solar Reflectance Index is used for compliance with LEED requirements and is calculated according to ASTM E 1980 using values for reflectance and emissivity. Emissivity is a material's ability to release absorbed energy. To meet LEED requirements a roofing material must have a SRI of 29 or higher for steep slope (>2:12) roofing and a SRI value of 78 or higher for low slope roofing.

Distributor

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