

# LYSAGHT



## LYSAGHT SPANDEK II®

Subtle Square Fluted Steel Cladding



DESIGN  
FLEXIBILITY



DURABILITY/  
SECURITY



HI-TECH  
PRODUCTION



RECYCLING



COLOUR  
CHOICES



THERMAL  
EFFICIENCY



WARRANTY

# LYSAGHT SPANDEK II

Subtle Square Fluted Steel Cladding



## Specification

LYSAGHT SPANDEK II is a proven product which has gained international acceptance as a contemporary looking symmetrical ribbed profile. LYSAGHT SPANDEK II provide real cost savings through its superior spanning capability permitting wider spans, less purlins and fasteners. LYSAGHT SPANDEK II is an ideal choice for housing, commercial and industrial applications.

When used as wall cladding, façade or similar application, trapezoidal ribs can be run vertically or horizontally.

## Latest Technology

State of the art testing methods have been used to determine the performance of LYSAGHT SPANDEK II. The Direct Pressure Testing Rig at BlueScope Lysaght's NATA registered testing laboratory has been used to develop the limit state performance of the cladding. The

state performance of the cladding. The Direct Pressure Test Rig offers a much better modeling of wind load, compared to traditional air bag test methods.

## Simple, low Cost Fixing

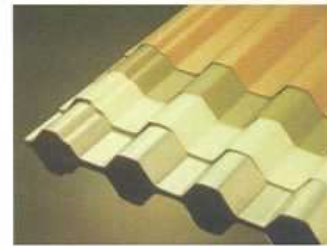
The long, straight lengths of LYSAGHT SPANDEK II can lowered into place and easily aligned. Fixing is simple and fast

## Smart Appearance

LYSAGHT SPANDEK II is available in long lengths cut to your requirements. For most jobs this means a single sheet can be laid from ridge to gutter without end laps. Snug nesting of ribs also ensures neat side laps.

## Minimum Roof Pitch

Long lengths and the special anti capillary side lap allow LYSAGHT SPANDEK II to be used safely on applications from vertical wall cladding to roof pitches as low as 3°. The patented, fluted side lap greatly improves weather-tightness. Any moisture drains back into the sheet tray and is dispersed by normal run off or evaporation.



## Sprung Curved Sheetting

LYSAGHT SPANDEK II can be sprung curved over an arched roof for detail contact PT BlueScope Lysaght Indonesia Technical Department.

## Material

LYSAGHT SPANDEK II finishes have base steel G550 (550MPa minimum yield stress) and 0.35, 0.40, 0.45, 0.50, 0.55 mm base metal thickness. The standard ZINCALUME® steel finish conforms to AS 1397-G550-AZ 150 The Clean COLORBOND® pre-painted finish is applied over ZINCALUME steel, coating class AZ 150 (minimum average 150 g/m2 coating mass) and is accordance with AS 2728, "Pre-painted and Organic Film / Metal Laminate Products".

## Mix And Match

The wide choice of colours and styles from BlueScope Lysaght Indonesia allows you to mix and match with ease.

## Advantage of High Tensile Steel

The yield strength of high tensile G550 ZINCALUME steel is almost four times as high as that of G300 ZINCALUME or soft steel. Due to this significant difference, G550 high tensile steel roofing and walling profiles offer the following benefits

## Mass & Yield LYSAGHT SPANDEK II

Thickness (mm)		Clean COLORBOND		ZINCALUME steel	
BMT	TCT	Kg/m	Kg/m2	Kg/m	Kg/m2
0.30	0.35	2.37	3.38	2.31	3.30
0.35	0.40	2.72	3.89	2.67	3.81
0.40	0.45	3.08	4.40	3.03	3.03



Method of Fixing	Fixing to Steel < 6 mm thick	Fixing to Timber Support	Fastener Type AS 3566 Class 3
Crest Fixed	ITW BUILDEX Selfdrilling Screw CTEKS 12-14 X 45 HGS	ITW BUILDEX Selfdrilling Screw CTEKS 12-11 X 65 HGS	
Valley Fixed for Walls Only	ITW BUILDEX Selfdrilling Screw CTEKS 12-14 X 20 HWFS	ITW BUILDEX Selfdrilling Screw CTEKS 12-11 X 25 HGS	
Side Laps and Accessories	ITW BUILDEX Selfdrilling Screw CSP 10-16 X 16 HWFS		

over G300 products:

- longer spanning capabilities (less Purlins)
- higher load carrying capabilities (less permanent deflection)
- greater durability (less dents)
- reduced building costs

#### Compatibility

Lead or copper are not compatible with Clean COLORBOND or ZINCALUME steel. Where underside condensation conditions are likely, coated steel purlins, girts, etc, should be used to avoid any ZINCALUME or Clean COLORBOND contact with bare steel.

#### Fasteners

BlueScope Lysaght Indonesia recommend that fasteners be selected having durability compatible with the roof material. Poor quality fasteners will lead to unsightly staining and or early failure of the roof material. The use of Electro Plated Zinc or Cadmium Plated screws without additional protection are not recommended.

Fasteners must comply with Australian Standard AS 3566 Amendment 1990 class 3 screws self drilling for the Building and Construction industry. Approved fasteners, color matched or plain are available from BlueScope Lysaght Indonesia. LYSAGHT SPANDEK II may be crest fixed on roofs and walls or valley fixed on walls. All fasteners used externally should be fitted with sealing washer.

#### Tolerances

Length                   : ± 0,15 mm  
Cover Width           : ± 4 mm

#### Lengths

Sheets are available up to 15 m custom cut. Longer lengths can be supplied, provided satisfactory transport and on site handling can be arranged.

#### Care and Storage Prior to Installation

Roof sheeting is delivered in strapped bundles and should not be allowed to get wet. Bundles should

be stored clear of the ground and protected by waterproof covers. If bundles become wet, the sheets should be separated, wiped with a clean cloth and stacked allow air circulation and completes drying.

#### Handling On Site

Long lengths should be lifted using a spreader bar and fabric sling. Clean dry gloves should be used. The sheets should not be dragged over rough surfaces or each other. Care should also be taken to prevent tools dragging on the surface.

#### Cutting Sheets On Site

A power saw with metal cutting blade is the best method for cutting LYSAGHT SPANDEK II sheets on site. Metal blades are preferred to carborundum discs as they produce fewer damaging hot metal particles and leave less burr on the cut sheet coated material. Sheets should be placed face down on padded supports. When cutting roof sheeting take care to protect the sheeting from swarf. Whenever possible,



cutting should be done on the ground and not over other should not be carried out on top of other painted surfaces.

### Laying Procedure

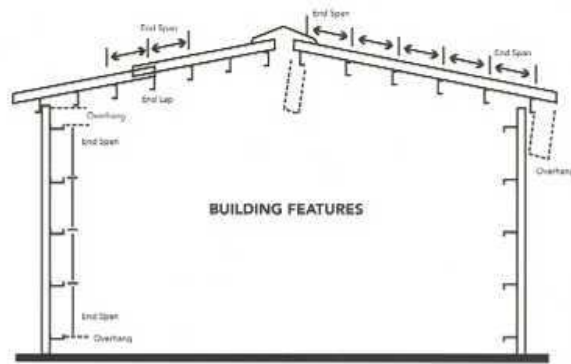
LYSAGHT SPANDEK II uses male and female ribs. Lift sheets onto the right way up with either all male or female ribs facing the same direction, otherwise sheets will have to be turned end-for-end during fixing. For correct side lapping, the rib with the longitudinal anti-capillary flute (male rib) is covered by the side rib without the longitudinal flute (female rib). Where LYSAGHT SPANDEK II roof pitches are less than 25°, or where the roof is exposed to extreme weather conditions, sheets flanges to be turned up approximately 80° at the high end of the roof, ie, at ridges or fascia, and turned down or lipped slightly at the gutter. A turn-up tool is available for the turn-up operation which can be carried out before or after the sheets are fixed in position. If turned-up after fixing, at least 25 mm clearance is required at the end of the sheets to position the tool. Fixing of walling application is similar to roofing.

### Fastening Sheets to Supports

LYSAGHT SPANDEK II may be crest fixed to timber or steel roofing or walling supports, or valley fixed to steel supports or timber walling supports. Do not locate fasteners less than 25 mm from end of sheets.

### Walking On Roof Sheeting

When walking along the length of LYSAGHT SPANDEK II walk at least two ribs. When walking across the width of roof sheeting, especially overhangs, walk over or close to the roofing supports. Generally keep



### SPAN TERMINOLOGY

weight evenly distributed over the soles of the feet. Clean and soft soled shoes should be worn. Care should be taken with new sheets as they may be slippery

### Cleaning Up

All metallic swarf and other debris should be swept from the roof area and gutters regularly, at the end of the day and at the completion of the installation. Failure to do so can lead to surface staining as the metal particles oxidize.

### Joint Sealing

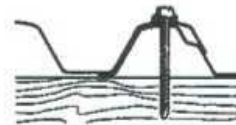
As it is not practical to solder ZINCALUME steel, where sealed joints are required use screw or rivets and silicone sealant. Only sealants branded as suitable for use with

Galvanized or ZINCALUME steel should be used.

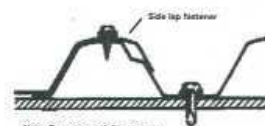
### LYSAGHT Products Rainwater Goods

Whether you're renovating a classic house or searching for a distinctive look for a new home, add the perfect finishing touch to the LYSAGHT SPANDEK II roof with our extensive range of rainwater goods. BlueScope Lysaght Indonesia rainwater goods provide the perfect finishing touch

### Crest Fixing for Roofing & Walling (shown to timber)



### Valley Fixing for Walling Only (shown to steel)



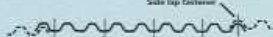
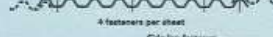
**Note:** Do not over tighten screws.  
**Recessed Nuts:** Do not use punches to form fastener holes.  
 Use correct size drill to suit fastener, or self-drilling screw.

### FASTENER SPACING

#### Crest Fastener Location



#### Valley Fastener Location



because they are designed to match our steel roofing and walling profiles exactly. Our rainwater goods are manufactured from ZINCALUME steel and Clean COLORBOND pre-painted steel, so they'll stand up to years of the harshest Indonesian climate. The choice of colours and styles is extensive covering everything you could need, from gutters and downpipes, to fascia,

flashings, and cappings, as well as fasteners and fixing clips.

#### **Non Cyclonic Areas**

A non-cyclonic area is defined as one in which a tropical cyclone is unlikely occur, in accordance with AS1170.2-1989, "SAA Loading Code, Part 2 Wind Loads". Contact your nearest BlueScope Lysaght Indonesia Sales Office for cyclonic area design and

and fixing. According to Indonesian Standard "Peraturan Pembebanan Indonesia untuk Gedung 1983" stated that the minimum wind pressure for the area within 5 km for coast is 40 kg/m<sup>2</sup> (around 25 m/s). The minimum wind pressure for the area outside 5 km from coast is 35 kg/m<sup>2</sup> (around 20 m/s)

LYSAGHT™ and SPANDEK® are registered trade mark of BlueScope Steel Limited.  
BlueScope is a trade mark of BlueScope Steel Limited  
Copyright © 2004 by BlueScope Steel Limited. All rights reserved.  
No part of this brochure may be reproduced, stored in a retrieval  
system, or transmitted in any form or by any means, electronic,  
mechanical, photocopying, recording or otherwise, without  
written permission of BlueScope Steel Limited.

For further information, brochures  
and your local distributors call :

**phone : (061) 685-1555**

**facs : (061) 685-0155**

Jl. Rumah Potong Hewan No.177  
MEDAN, INDONESIA

[www.bluescopesteel.co.id](http://www.bluescopesteel.co.id)

## PT BlueScope Lysaght Indonesia

**Jakarta:**

(62-21) 8998-2965

**Surabaya:**

(62-31) 897-1279

**Medan:**

(62-61) 685-1555

