

# LYSAGHT

## PRODUCT CATALOGUE

---

ROOFING & WALLING  
TRUSS & FRAME  
FLOOR DECKING  
ZED & CEE PURLINS AND GIRTS

July 2019 edition

---

# 1 ROOFING & WALLING














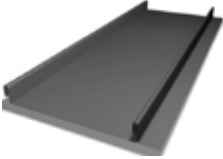
Countless of clients across Asia rely on the quality, durability and integrity of LYSAGHT® Roofing and Walling products in making their architecture concept a reality.

From the straightforward seamless wall panels to extreme roofing lengths and curves, our comprehensive range of roofing and walling products meet the requirements of most architecturally demanding structures, without compromising on strength, flexibility or aesthetics.



Indonesia Convention Exhibition (ICE), BSD

## RANGE OF PROFILES

CONCEALED-FIXED				
	KLIP-LOK® OPTIMA	KLIP-LOK®	SELECT SEAM III™	PRESTIGE PANEL II™
PIERCED-FIXED				
	SPANDEK®	SPANDEK® II	SPANDEK® OPTIMA	AUSDEK®
				
	TRIMDEK®	TRIMDEK® OPTIMA	TRIMDEK® CRIMP-CURVED	
SEAMING				
	FLEX-LOK®	ULTRA-RIB™	LOCKED-SEAM™	

## STANDARD SPECIFICATION

PROFILE	EFFECTIVE WIDTH (MM)	RIB DEPTH (MM)	MINIMUM ROOF SLOPE	STANDARD THICKNESS (MM BMT)	APPLICATION	CURVED	TAPERED
KLIP-LOK® OPTIMA™	980	43	2°	0.40; 0.45	ROOFING	SC	-
KLIP-LOK®	406	41	2°	0.45	ROOFING	SC	-
SELECT-SEAM III™	300	25	5°	0.55	ROOFING	-	-
PRESTIGE PANEL II™	295	25	-	0.55	WALLING; CEILING	-	-
SPANDEK® OPTIMA™	935	24	3°	0.35; 0.40	ROOFING; WALLING	SC; CC	-
SPANDEK®	700	24	3°	0.35; 0.40	ROOFING; WALLING	SC; CC	-
SPANDEK® II	696	24	3°	0.35; 0.40	ROOFING; WALLING	SC; CC	-
TRIMDEK® OPTIMA™	1015	28.5	3°	0.35; 0.40	ROOFING; WALLING	SC; CC	-
TRIMDEK®	760	29	3°	0.35; 0.40	ROOFING; WALLING	SC; CC	-
AUSDEK®	750	32	3°	0.35; 0.40	ROOFING; WALLING	SC; CC	-
FLEX-LOK™	400	65	1.4°	0.55; 0.75	ROOFING	SM	T
ULTRA-RIB™	650	110	2°	0.55	ROOFING	-	-
LOCKED-SEAM™	330	25	3°	0.55	ROOFING	SM	T

SC: spring-curve; CC: crimp-curve; SM: smooth-curve; T: tapered

## EXTRA LONG SHEETS

Because our roofing and walling is manufactured by continuous processes, sheet lengths can be supplied up to the limits of transport regulations.

Most of our roofing and walling profile are available in extra long lengths, produced by our on-site mobile rollformer/ Roll On Site. This service is available based on enquiry.



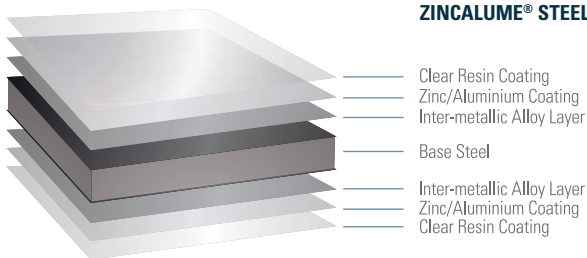
Mobile Elevated Rollforming (MERF) System

## MATERIAL

### Zincalume®

BlueScope's proprietary metallic coating technology – ZINCALUME® steel is superior in corrosion performance under varied conditions, when compared with other galvanized steel.

ZINCALUME® steel comprises 43.5% zinc, 55% aluminium and 1.5% silicon. The minimum coating mass of 150 gr/m<sup>2</sup> offers a high level of corrosion resistance.



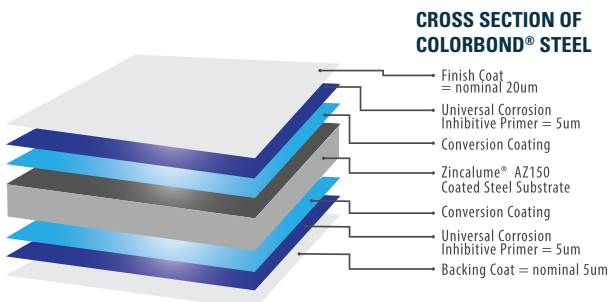
#### CROSS SECTION OF ZINCALUME® STEEL

Clear Resin Coating  
Zinc/Aluminium Coating  
Inter-metallic Alloy Layer  
Base Steel  
Inter-metallic Alloy Layer  
Zinc/Aluminium Coating  
Clear Resin Coating

### Colorbond®

COLORBOND® steel combines the superior strength of aluminium-zinc alloy-coated steel with proprietary paint system technology exclusive to Bluescope.

COLORBOND® steel undergoes continuous research and development, with stringent product testing in the harshest environments.



#### CROSS SECTION OF COLORBOND® STEEL

Finish Coat = nominal 20um  
Universal Corrosion Inhibitive Primer = 5um  
Conversion Coating  
Zincalume® AZ150 Coated Steel Substrate  
Conversion Coating  
Universal Corrosion Inhibitive Primer = 5um  
Backing Coat = nominal 5um

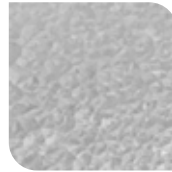


## COLOURS

LYSAGHT® roofing and walling are available in attractive range of colours in COLORBOND® steel and unpainted ZINCALUME® aluminium/zinc alloy-coated steel.

The standard COLORBOND® steel offers a full range of contemporary colours suitable for all building projects. COLORBOND® XPD steel provides superior aesthetic qualities, and COLORBOND® ULTRA steel is intended for severe coastal or industrial environments.

### Zincalume®



### Colorbond®

#### STANDARD COLOR\*



\*The COLORBOND® steel colour shown have been reproduced to represent actual product colours as accurately as possible. However, we recommend checking your chosen colour against an actual sample of the product before purchasing, as varying light conditions and limitations of the printing process may affect colour tones.

## WARRANTIES

- Material warranties cover the material those products are made from, such as ZINCALUME® steel, COLORBOND® steel.
- Warranties are available against corrosion to perforation by weathering in the natural elements, and against paint flake and peel.
- Warranty for painted materials vary according to material used.
- Warranty terms and conditions apply.
- Warranties are not available for all products and applications.
- The duration and terms and conditions of available warranties vary according to product use and application.

## INHERENT SURFACE WAVINESS

OIL CANNING can be defined as a perceived waviness in the flat areas of metal roofing and metal cladding panels. Generally the period and amplitude of the wave depend on the continuous width of the flat section of the profile. Oil canning is an inherent part of light gauge cold formed metal products, particularly those with broad flat areas.

Since many uncontrollable factors are involved, no manufacturer can realistically assure the total elimination of oil canning. With careful attention to the production and selection of material, to the panel design, and to installation practice, oil canning can be effectively minimised.

Unless specific tolerances have been incorporated into the contract documents and accepted by the panel provider and panel manufacturer, and if reasonable precautions have been taken, oil canning is not grounds for panel rejection.

**For other enquiries outside standard application, material and thickness, please contact us**



# 2 TRUSS & FRAME



**SMARTFRAME®**

Lysaght's SMARTRUSS® and SMARTFRAME® are innovative, fast, efficient and well-engineered light weight steel truss and framing systems for modern construction. The systems offer durability, affordability, strength, stability and compatibility with the traditional building systems.

Made from BlueScope's TRUECORE® G550 Steel, LYSAGHT® SMARTRUSS® and SMARTFRAME® is backed by a material warranty, unmatched by conventional truss material. It provides a lightweight alternative to timber roof trusses and is competitively priced as the system's structural integrity leads to lower lifetime costs.

Advantages of SMARTRUSS® and SMARTFRAME® :

- ✓ Strong
- ✓ High buildability score
- ✓ Lightweight
- ✓ Durability
- ✓ Design Flexibility

LYSAGHT SMARTRUSS® and SMARTFRAME® designs are supported by SUPRACADD® detailing software:

- ✓ Model the geometry
- ✓ Designs the wall frames and roof trusses and
- ✓ Facilitates truss structural computation

SUPRACADD® has been certified as a software which comply with technical provision for limit state cold-formed steel structure design.

Australian Limit State Code:  
AS/NZ 4600:2005  
AS/NZ 1170:2002



SMARTRUSS® light weight steel roof truss application

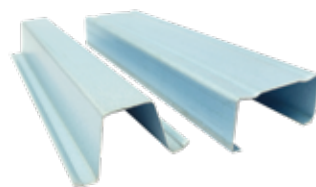


SMARTFRAME® light weight steel houseframing application

## STANDARD SPECIFICATION

	SMARTRUSS®	SMARTRUSS® Classic
<b>MATERIAL</b>	<b>TRUECORE® Steel</b>	<b>BLUESCOPE ZACS®</b>
<b>YIELD STRENGTH</b>	G550 (550 MPa)	G550 (550 MPa)
<b>COATING MAS</b>	AZ 150	AZ 100
<b>PROFILE</b>	<b>TRUSS</b> C75ra (flange width 38/40)	<b>TRUSS</b> C75ra (flange width 38/40) C75sa (flange width 32.5/34)
<b>THICKNESS (MM BMT)</b>	<b>TRUSS</b> 0.60; 0.70; 0.75; 1.00	<b>TRUSS</b> • 0.60; 0.70; 0.75 • 1.00 (only for C75ra)
<b>ROOF BATTEN:</b>	<b>TOPSPAN 40</b>	<b>ROOF BATTEN:</b> TOPSPAN 35
<b>ROOF BATTEN:</b>	<b>• 0.45</b>	<b>ROOF BATTEN:</b> • 0.45
<b>WARRANTY*</b>	Up to 15 years	Up to 10 years

\* Terms and conditions apply



TOPSPAN 40 Profile

C75ra Profile

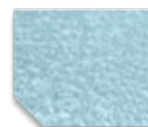


TOPSPAN 30 Profile

C75sa Profile

## MATERIAL

**Truecore®**

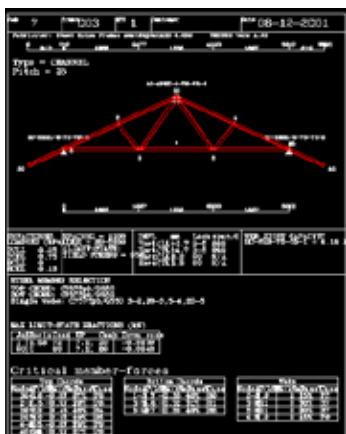
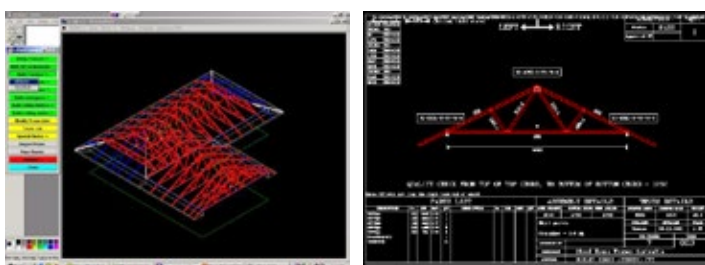


**BLUESCOPE Zacs**



**TRUECORE®** and **BLUESCOPE ZACS®** G550 steel are hot-dipped aluminium zinc-coated structural steel coated with 55% Al, 43.5% Zn and 1.5% Si, with a guaranteed minimum yield strength of 550 Mpa.

**TRUECORE®** steel manufactured using blue-tinted resin with AZ150 coating class and **BLUESCOPE ZACS®** steel manufactured using clear resin with AZ100 coating class.



# 3 STRUCTURAL COMPONENTS



SMARTDEK® is a new innovative steel decking profile that brings greater economy and design freedom to building with composite concrete slabs.

The profile has been specifically developed for Australian high tensile steels – which makes SMARTDEK® one of the best performing “W” profiles in the world. This profile is designed to meet your requirement availability for diverse building needs. This resulted in a new innovative and optimized shape for SMARTDEK®, having flange stiffeners and deep embossments, which act as web stiffeners, to increase the load carrying capacity. Due to the large depth of the profile, an increase of the flexural rigidity reduces deflections.

SMARTDEK® steel sheets are permanent formwork for a suspended composite concrete slab. SMARTDEK® is a complete structural steel decking system for concrete, masonry or steel frame construction.

The effective cover width is 960mm. In the assembled state, the profile comprises two intermediate male and female ribs for every interlocking side-lap joint.

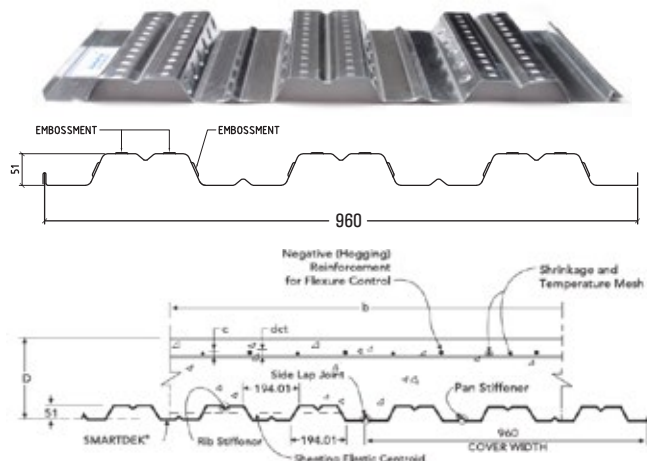
When concrete hardens, SMARTDEK® acts as the bottom reinforcement of the concrete slab. SMARTDEK® is a complete structural steel decking system for concrete, masonry or steel frame construction.

SMARTDEK® is supported by excellence and PC based software. MEGAFLOOR™ software is an ultimate tool to design decking as formwork and composite for optimum result using empirical equation.

## STANDARD SPECIFICATION

THICKNESS (MM)		COATING MASS	YIELD STRENGTH (MPa)	INTERNATIONAL STANDARD EQUIVALENT
BMT	TCT			
0.70	0.75	SUPERDYMA 180gr/m <sup>2</sup>	550	
0.70	0.75		550	
1.00	1.05	ZINC-COATED 275gr/m <sup>2</sup>	550	AS1397-2001 JIS G3302 & G3321
1.20	1.25		450	

For non standard enquiries, please contact us



### WHY SMARTDEK®?

- ✓ Research and Development Support
- ✓ Product Recommendation and Design to Suit Your Specifications
- ✓ Quality Assurance – Material & Manufacturing Process
- ✓ World Wide Project Experience

## LYSAGHT® ZED & CEE PURLINS & GIRTS

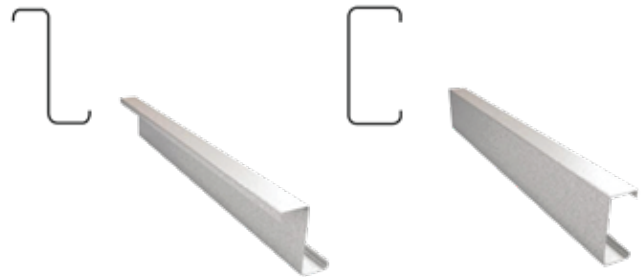
LYSAGHT® Zed and Cee sections are accurately roll-formed from high-strength zinc-coated steel to provide an efficient, lightweight, economical roofing and cladding support system for framed structures.

LYSAGHT® purlins are roll-formed into two standard shapes, Z and C sections. Both perform effectively and in many instances the choice comes down to personal preference.

## STANDARD SPECIFICATION

SECTION SIZE (MM)	THICKNESS (MM BMT)	COATING MASS	YIELD STRENGTH (MPa)	STANDARD
Z & C 150	1.5, 1.9, 2.4	ZINC-COATED 275gr/m <sup>2</sup> (MINIMUM)	450	
Z & C 200	1.5, 1.9, 2.4		450	AS 1397-1993
Z & C 250	1.5, 1.9, 2.4		450	

For non standard enquiries, please contact us



ZED PURLIN profile

CEE PURLIN profile

### When to use Z sections

LYSAGHT® Zed sections may be used over single spans, unlapped continuous and lapped continuous spans in multi-bay buildings. Lapped continuous spans result in a considerable capacity increase in the system.

### When to use C sections

LYSAGHT® Cee sections may be used in single spans and unlapped continuous spans in multi-bay buildings. Cee sections are ideal as eave purlins or where compact sections are required for detailing. Cee sections cannot be lapped.



Sports Hall Total Indonesia

# Trusted Partner For Building System



## PT NS BlueScope Lysaght Indonesia

### OFFICE & FACTORY

#### BEKASI

Jl. Irian Blok DD2 No.2  
Kawasan Industri MM2100, Cibitung, Bekasi  
+62 21 8998 2965

#### SIDOARJO

Jl. Panglima Sudirman No.17  
Menyanggong, Kletek, Taman, Sidoarjo  
+62 31 897 1270

#### MEDAN

Jl. Pulau Palu No.28  
Kawasan Industri Medan Tahap I, Medan  
+62 61 685 1555

#### MAKASSAR

Jl. Kima Raya 1 No. 1  
Kawasan Industri Makassar (KIMA)  
+62 411 515 651

For information, brochure and local distributor please contact:

+62 21 8998 2965

[Lysaght.Indonesia@bluescope.com](mailto:Lysaght.Indonesia@bluescope.com)

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

LYSAGHT®, KLIP-LOK®, KLIP-LOK® OPTIMA, SPANDEK®, SPANDEK® II, SPANDEK® OPTIMA, TRIMDEK®, TRIMDEK® OPTIMA, AUSDEK®, FLEX-LOK®, ULTRA-RIB™, LOCKED-SEAM™, SELECT-SEAM III™, PRESTIGE PANEL II™, SMARTRUSS®, SMARTFRAME®, SMARTDEK® are registered trade marks of BlueScope Steel Limited.

