BLUESCOPE

NEW PAINT **SYSTEM**
SUPER POLYESTER *TECHNOLOGY*

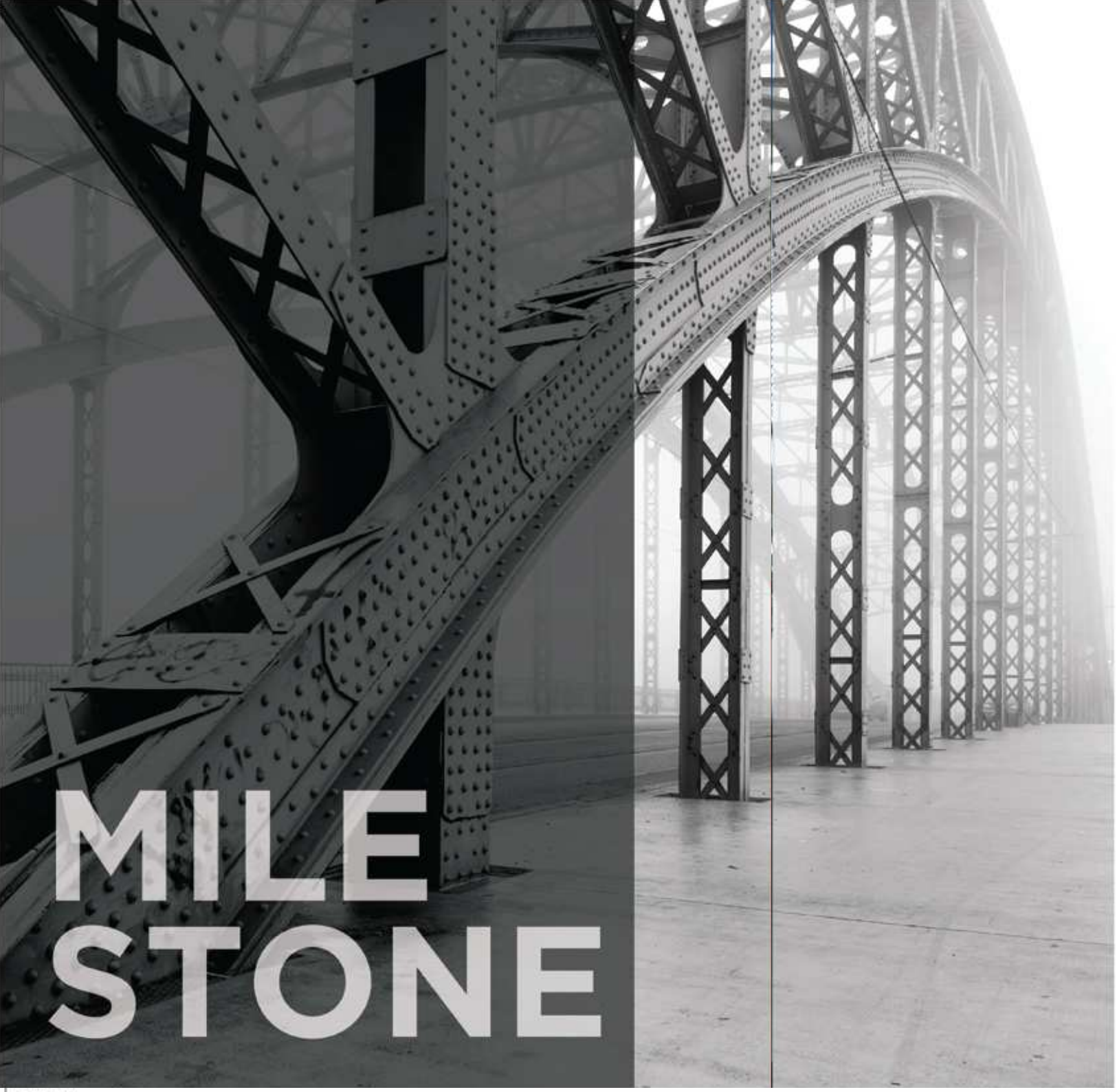
DESIGNED FOR
VISIONARIES
BUILD FOR
NATURE

Colorbond®

COLORBOND®

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

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



MILE STONE

1996-1998

- Colorbond® manufactured by PT NS BlueScope Indonesia
- Excellence corrosion resistance (AZ150)
- Excellence colour performancez

2000

- Clean Technology to resist tropical staining

2004

- Improved polyester topcoat and add IR reflective pigments: Longer Lasting, Cooler Roof

2009

- Improved delamination with weatherable primer

2012-2014

- Introduce pastel colours
- Repackage IR reflective technology as Thermatech® technology
- Introduce low gloss paint extension in 2014

2016

- Latest technology super polyester to enhance colour performance

THERMATECH®

CREATES A COOLER BUILDINGS

COMFORTABLE MASTERPIECE

COLORBOND® with Thermatech® reduces the heat of your building surface by reflecting solar radiation, preventing heat from traveling downwards.
COLORBOND® gives a better comfort for buildings in tropical areas. Thus a COLORBOND® building uses less energy and provide more comfort.

OPTIMAL PAINT SYSTEM FOR ENDURING QUALITY

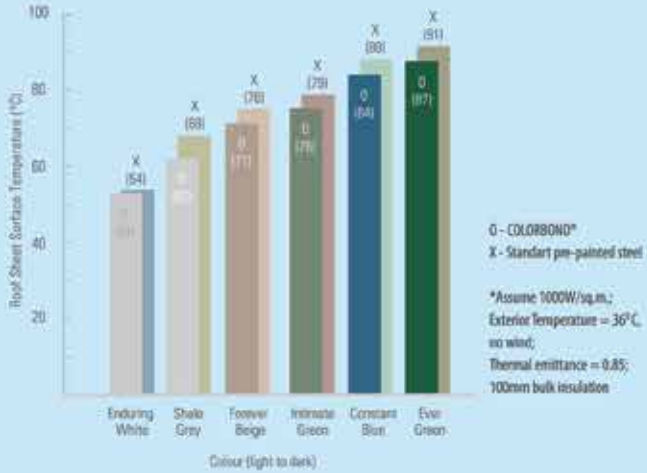
BlueScope utilities optimum paint formulation and pigment blends to provide excellent long-term colour stability for COLORBOND® products.

First, an effective coating is prepared and a corrosion inhibitive primer is applied for adhesion of the top coat on the substrate and to provide additional corrosion resistance. This is followed by application of the paint top coat with optimum paint thickness to maximize the paint performance against weathering. The multiple coating system layers act in synergy to provide superior performance and durability.

The proprietary paint system is a result of extensive R&D testing, including actual field exposure testing. It has been proven that the paint system used for COLORBOND® provides superior durability against weathering and UV penetration when compared with other pre-painted steel.

With Thermatech®, your building surface reflects more sun's rays, absorb less heat, and create a cooler surface temperature, a highly important feature for the harsh tropical climates.

Comparison of roof sheet temperatures (insulated*):



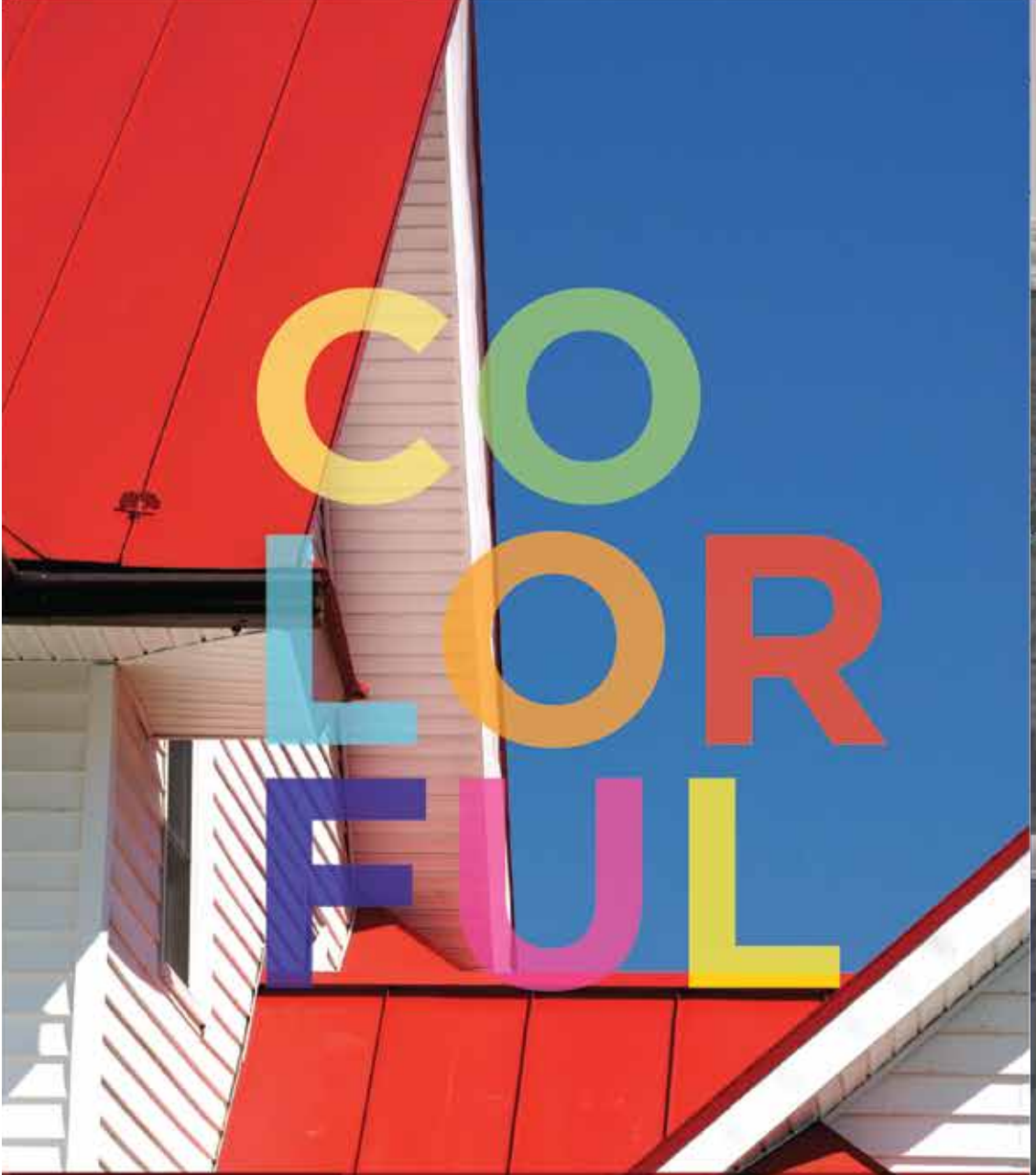
O - COLORBOND®
X - Standart pre-painted steel

*Assume 1000W/sq.m.; Exterior Temperature = 36°C, no wind; Thermal emittance = 0.85; 100mm bulk insulation

The temperature of the roof sheet is lowered due to the Thermatech® technology in COLORBOND®. This in turn cuts down the heat radiation traveling downwards into the building making the interior of the building cooler.

Comparison of surface temperature

Thermatech® solar reflectance technology is able to lower the temperature by absorbing less heat from the sun as illustrated below.



BEAUTIFUL YET ELEGANT

COLORBOND® using the newest painting technology that gives excelent colour stability without effecting the durability. Super Polyester Paint System Technology in the COLORBOND® give beauty you can dream of your building.

NEW PAINT **SYSTEM**
SUPER POLYESTER TECHNOLOGY

BlueScope's Product Innovation Technology had developed the next generation of highly durable **Super Polyester Paint** system.

This latest product innovation is currently used in **Australia since 2013** to provide supreme colour performance:

- Improved Gloss Retention (%)
- Improved Chalking Resistance
- Lesser Colour Fading (Delta E)

Fade is the loss of colour calculated in Hunter ΔE units in accordance with ASTM D2244-02 procedures. One ΔE units denotes the smallest degree of colour change visible to naked eye.

Two rows of coloured coated metal panels depict colour change (fade) of eight (8) ΔE Hunter Units and five (5) ΔE Hunter Units. One ΔE Hunter unit denotes the smallest degree of color change visible to the naked eye.

No Changes in the Product DNA except topcoat formulation change to New Paint System Super Polyester Technology

Ingredient Description	COLORBOND XRW	COLORBOND ULTRA
Steel Grade	G550 / G 300	G550 / G 300
Metallic Coating	AZ150	AZ200

LONG LASTING BEAUTY

A combination of airborne particles, heat and humidity sticks on the surface of a steel sheet will bond and create dark stains on the building material. Over time, the building will look dirty and aged. COLORBOND® unique paint system prevents this bonding process, making the dirt particles remain loose and washable by rainfall for a brand new look at all times.

KEEP YOUR MASTERPIECE PRIME

BlueScope developed a revolutionary paint system, which resist dirt staining. Dirt staining is caused by a combination of airbone particles, heat and humdity. On convetional pre-painted steel, airborne particles like dirt settle on the pre-painted steel surface. The combination of heat and humidity then results in dirt particles bonding to the pre-painted steel surface. This eventually forms dark stains on the building material. Over time, the building will look dirty and aged.

The unique COLORBOND® paint system prevents dirt from bonding to the surface of COLORBOND® (figure A), as compared to other pre-painted steel paint system where dirt particles can bond to the surface (figureB).

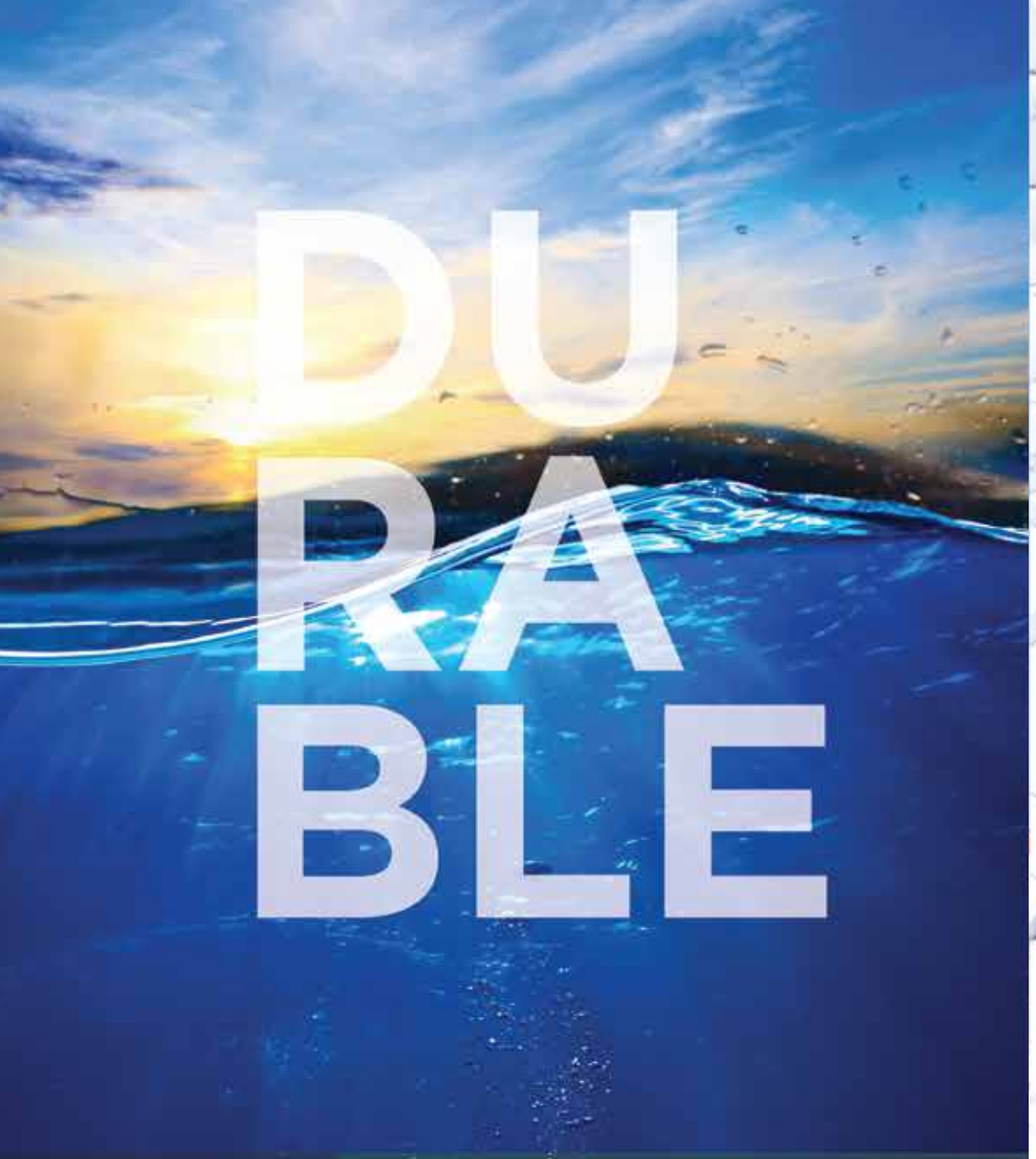
Figure A
Microscopic pictures shows dirt not bonding to the surface of COLORBOND®.

Figure B
Microscopic pictures shows dirt bonding to the surface of conventional pre-painted.

CLEAN TECHNOLOGY

RESIST TROPICAL DIRT STAINING

CLEAN TECHNOLOGY RESIST DIRT PARTICLES FROM BONDING WITH THE SURFACE.



PEACE OF MIND

ZINCALUME® AZ150 powers COLORBOND® as it base metal substrate contains aluminium, zinc, and silicon. This special coating system protect the base metal against corrosion caused by tropical rain, fierce salt winds and pollution.

PROTECT YOUR BUILDING
FROM CORROSION

COLORBOND®
WITH ZINCALUME® AS BASE METAL SUBSTRATE

A chemical reaction called oxidation will break metal such as steel, resulting in rust or oxides around the corroded area.

COLORBOND® is incorporated with BlueScope proprietary metallic coating technology - the Zinc-Aluminium ZINCALUME® aloy-coated steel as base substrate, with 55% aluminium 43.5% zinc, and 1.5% silicon. ZINCALUME® stays in a good condition if compared to a galvanized after tested in several periods.

HOW DOES IT WORK?

Zinc is an active metal that protects less active metal (such as steel) from corrosion by sacrificing itself and getting corroded first. Combined with Aluminium as a strong barrier that resists corrosion, ZINCALUME® provides a durable and effective protection against corrosion.

CROSS-SECTION OF COLORBOND®

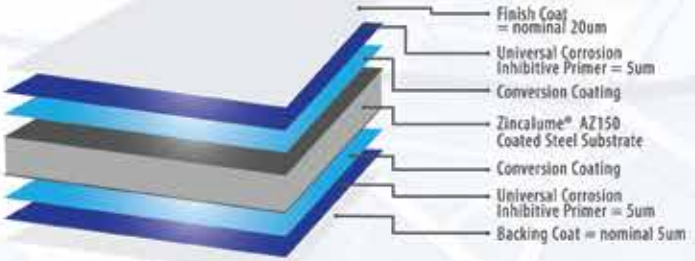


Figure A - Microscopic view of Galvanised steel

Figure B - Microscopic view of ZINCALUME

COLOUR

INSPIRE GREAT CREATION

BlueScope utilizes optimum paint formulation and pigment blends to provide excellent long-term colour stability for COLORBOND® colour choices and comes in a variety of colours to suit your individual needs.

The proprietary paint system is a result of extensive R&D testing, including actual field exposure testing. It has been proven that the paint system used for COLORBOND® provides superior durability against weathering and UV penetration when compared with other pre-painted steel.

STANDARD

- Off-White
- Mist Green
- Heritage Red
- Armour Grey
- Coral Blue
- Sonata Blue
- Bart Red
- Angsana Stone
- Gull Grey

NON - STANDARD

- Mintsea Green
- Caulfield Green
- Pine Green
- Imperial Orange
- Fall Red
- Tobac Brown
- Beach Blue
- Cape Charcoal
- Kiama Blow
- Night Sky
- Sky Gold
- Bright Silver
- Lazurite Blue**
- Coopper Penny

*warna hanya sebagai referensi. Untuk warna sebenarnya, gunakan sample coupon warna.

COLORBOND® ULTRA

A HEAVY DUTY BEAUTY

GENERAL DESCRIPTION

COLORBOND® Ultra specifically design by NS BlueScope, combines long term durability and exceptional corrosion resistance. Its substrate conforms to Australian Standard AS1397:2001 whilst its paint coating conforms to AS/NZS 2728:2007

TYPICAL USES

Exterior building profiles in applications requiring excellent corrosion resistance. Suited to moderately severe marine and industrial environments (typically 100-200 m from the source of the severe environment).

COATING DESCRIPTIONS

Preffered Subtrates	: Zincalume® ULTRA G550 AZ200 (Zn/Al Alloy-Coated Steel) Zincalume® ULTRA G300 AZ200 (Zn/Al Alloy-Coated Steel)
Pre-treatment	: Corrosion resistant proprietary conversion coating
Topside Primer Coat	: Universal corrosion inhibitive. Nominal thickness : 5 micron.
Finishing Coat	: Custom formulated system. Nominal film thickness 20 micron. On the top or weather side. The finish coat can, if required, be applied to both sides to provide a double-sided product. Super polyster paint system.
Backside Primer Coat	: Universal corrosion inhibitive. Nominal thickness : 5 micron.
Backing Coat	: Custom Formulated Shadow Grey Nominal thickness : 5 micron

COLORBOND® XAL

INNOVATION MEETS CAPABILITY

GENERAL DESCRIPTION

COLORBOND® XAL is a prepainted aluminium that has long lasting, durable good workability, lightweight alternative to other cladding materials. Aluminium has high capability with other material. Aluminium provides high thermal insulations and minimal maintenance to remain corrosion-free.

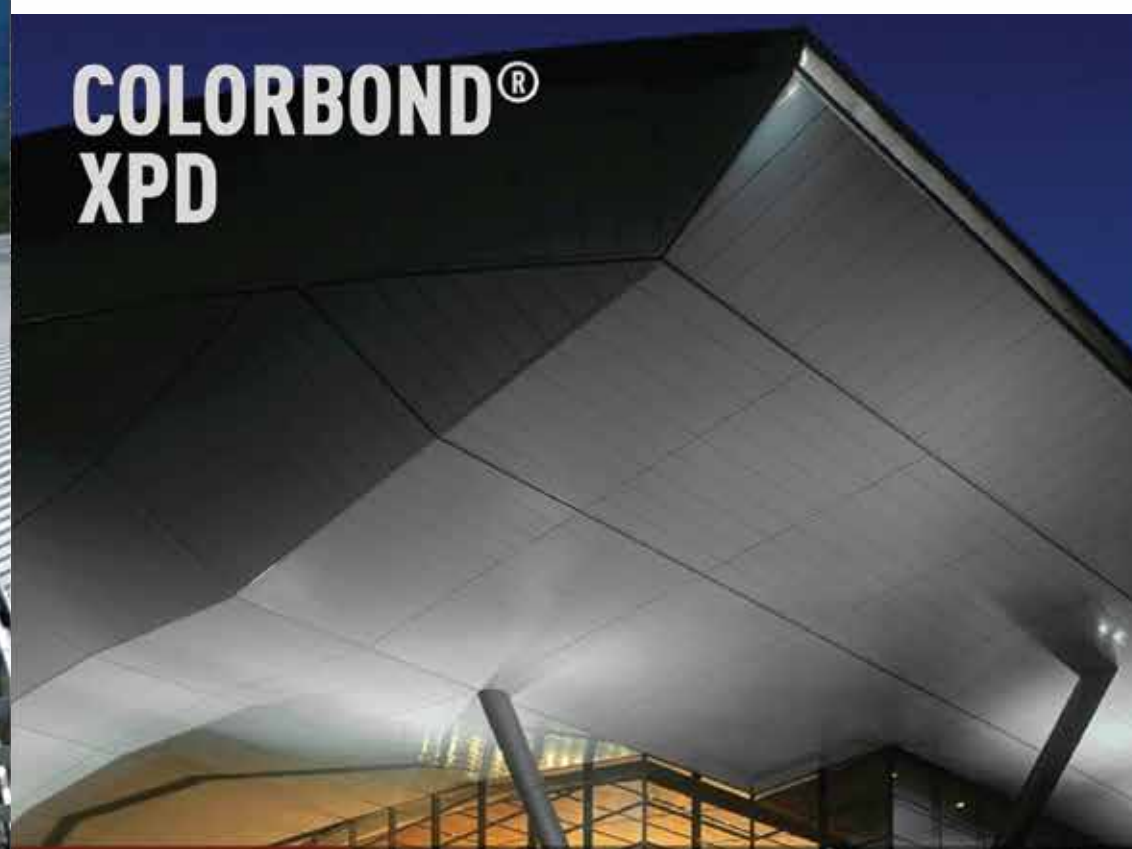
TYPICAL USES

High performance roofing, walling, architecturai panels and building accessories.

COATING DESCRIPTIONS

Preffered Subtrates	: Alluminium Alloy 3105 H16
Pre-treatment	: Corrosion resistant proprietary conversion coating
Topside Primer Coat	: Universal corrosion inhibitive primer. Nominal thickness : 5 micron.
Finishing Coat	: Custom formulated (PVDF), Nominal thickness 20 micron . On the top or weather side. To provide premium durability product.
Backside Primer Coat	: Universal corrosion inhibitive Nominal thickness : 5 micron.
Backing Coat	: Custom Formulated Shadow Grey. Nominal Thickness : 5 micron

COLORBOND® XPD



COLOUR THAT MADE TO LAST

GENERAL DESCRIPTION

COLORBOND® XPD has been developed by Bluescope to provide premium durability in excellent weather ability & high form ability for exterior application.

TYPICAL USES

Prestigious roofing and walling, architectural panels and building accessories requiring excellent colour and glass retention.

COATING DESCRIPTIONS

Preffered Subtrates	: Zincalume® G550 AZ150 (Zn/Al Alloy-Coated Steel) Zincalume® G300 AZ150 (Zn/Al Alloy-Coated Steel)
Pre-treatment	: Corrosion resistant proprietary conversion coating
Topside Primer Coat	: Universal corrosion inhibitive Nominal thickness : 5 micron.
Finishing Coat	: Custom formulated system. PVDF coating system. Nominal thickness 20 micron on the top or weather side. The finish coat can, if required, be applied to both sides to provide a double-sided product.
Backside Primer Coat	: Universal corrosion inhibitive Nominal thickness : 5 micron.
Backside Coat	: Custom Formulated Shadow Grey. Nominal Thickness : 5 micron

COLORBOND® XRW

THE ANSWER FOR YOUR NEEDS

GENERAL DESCRIPTION

COLORBOND® reflects BlueScope enduring qualities – innovative, superior, cutting-edge, and trend leading. With our Thermatech® solar reflectance technology, our dirt-resisting Clean Technology, and durable paint and base substrate, we are helping to create a future that is comfortable not just for people, but the landscape too.

TYPICAL USES

For prestigious roofing, walling, architecture panels, and building accessories.

COATING DESCRIPTIONS

Preffered Subtrates	: Zincalume® G550 AZ150 (Zn/Al Alloy-Coated Steel) Zincalume® G300 AZ150 (Zn/Al Alloy-Coated Steel)
Pre-treatment	: Corrosion resistant proprietary conversion coating
Topside Primer Coat	: Universal corrosion inhibitive Nominal thickness : 5 micron.
Finishing Coat	: Custom formulated system. Nominal film thickness 20 micron. On the top or weather side. The finish coat can, if required, be applied to both sides to provide a double-sided product. Super Polyster Paint System
Backside Primer Coat	: Universal corrosion inhibitive. Nominal thickness : 5 micron.
Backing Coat	: Custom Formulated Shadow Grey

BLUESCOPE

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