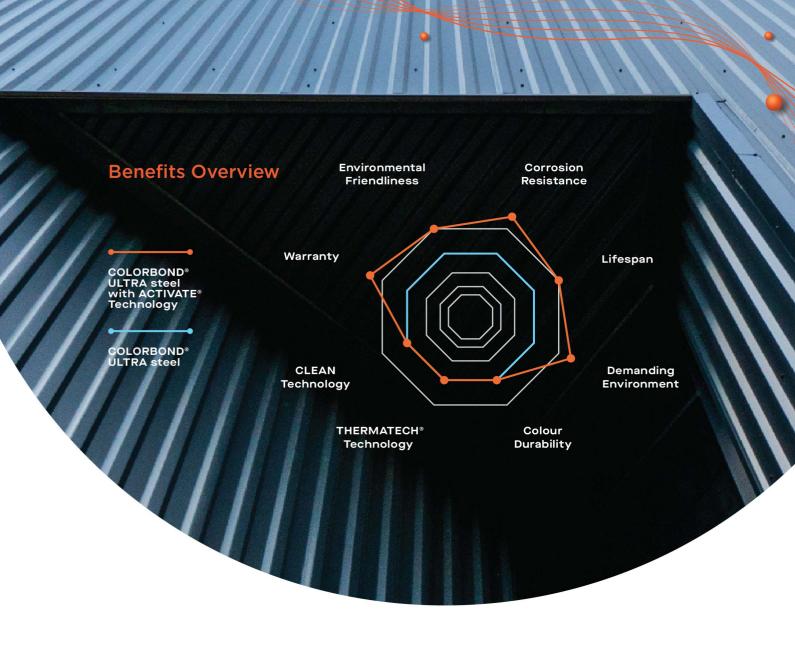




∆ctivate[™]





The Next Generation Is Here



20+ years of research & development



20+ patents on BlueScope's pioneering alloy coating structure and manufacturing process



AU\$100+ million investment in R&D

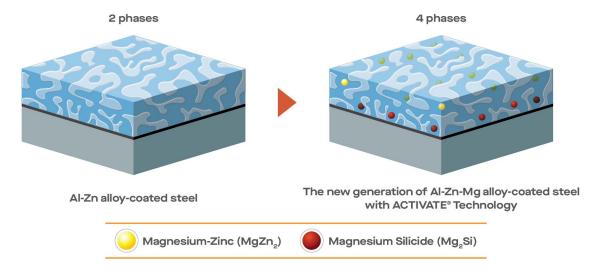


18,000+ steel panels tested, both in laboratory and real-world environments

ACTIVATE® TECHNOLOGY: A NEW ERA IN CORROSION RESISTANCE

The secret behind BlueScope's patented ACTIVATE® Technology lies in its unique 4 phases microstructure, which includes Aluminum-Zinc and two special Magnesium compounds.

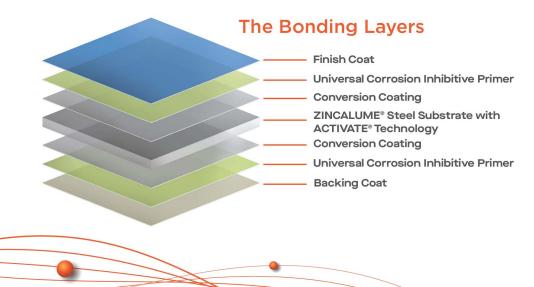
The microstructure of the AM alloy coating contains Aluminum-rich areas within a Zinc-rich matrix. However, the Zinc-rich region also includes fine particles of Magnesium-Zinc (MgZn $_2$) and Magnesium Silicide (Mg $_2$ Si). Careful process control ensures that most of the magnesium silicide is positioned towards the bottom portion of the coating layer (close to the base steel), while most of the magnesium-zinc is positioned towards the top portion. This positioning is crucial for enhancing the corrosion resistance of the AM coating.



Crafted with Precision, Coated in Distinction

With the right formulation and state-of-the-art facilities, they become catalysts for achieving the perfect outcome. At BlueScope's manufacturing plants, our optimised coating technology and precise process control ensure that the right magnesium compounds are bonded precisely where they need to be, enabling the enhanced corrosion resistance of ACTIVATE® Technology.

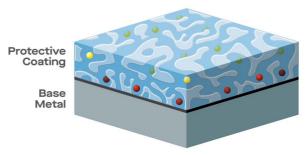
This innovative composition is precisely blended and bonded to creates a self-sealing effect, significantly enhancing corrosion resistance at cut edges, screw holes, and scratches, ensuring projects withstand the test of time.



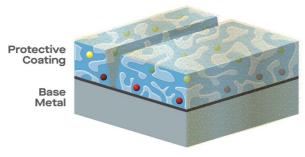
THE SCIENCE

BEHIND THE ACTIVATE® TECHNOLOGY

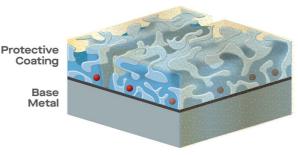
How It Works Over Time



The active metallic coating provides superior corrosion resistance for the coated metal through two strategically positioned magnesium compounds: the Magnesium-Zinc (MgZn $_2$) and Magnesium Silicide (Mg $_2$ Si), targeting 2 different stages of the product life cycle.



At the early stage of weathering exposure, a thin Zinc-Aluminium oxide layer will form on the cut edges. The Magnesium-Zinc is instantly ACTIVATED, acting to stabilise the oxide layer, creating a robust protection barrier against corrosion at these weak points.



Deeper within the coating, the Magnesium Silicide ACTIVATEs the aluminium compound, preventing corrosion from reaching and attacking the base metal. This action hence reduces coating loss and significantly improves long-term protection against corrosion.

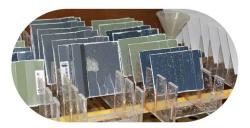


PROVEN PERFORMANCE,

TRUSTED QUALITY

Backed By 20+ Years of Testing

ACTIVATE® Technology's superior performance is backed by extensive evidence from rigorous laboratory tests and real-world trials across the globe, to live up to the high expectations in durability.



Accelerated Laboratory Tests
Over 8,000 panels subjected to
Q-Fog cyclic testing.



Real-World Exposure Tests
10,000 panels tested at 22 sites globally, including severe marine environments.

Our test results were independently verified by the internationally recognised French Corrosion Institute (FCI), confirming COLORBOND® steel with ACTIVATE® Technology's superior resistance to scratching, scuffing, and edge corrosion.

Additional Testing Methods:



5 Scaled-up, purpose-built Outdoor Test Huts simulating real-world building applications.



Over 50 actual buildings installed with AM-coated cladding and accessories, monitored for weathering impact under real building operations.



On-going exposure testing at Bellambi Point, Wollongong, Australia



Al-Zn alloy-coated steel



The new generation of Al-Zn-Mg alloy-coated steel with ACTIVATE $^{\otimes}$ Technology

Superior corrosion resistance of coated steel with ACTIVATE® Technology after 22 years at Bellambi Point, The Surf Marine Site.

BEYOND PROTECTION, UNCOMPROMISING BEAUTY

COLORBOND® ULTRA steel with ACTIVATE® Technology is not just about strength; it is about enduring aesthetics. Backed by our proven proprietary paint system, COLORBOND® steel offers a vibrant palette of colours guaranteed to last.

Long Lasting Colour

BlueScope's optimum paint formulation and pigment blends provide exceptional long-term colour fading resistance and gloss retention to COLORBOND® steel, especially against harsh tropical climates and UV degradation, ensuring long-lasting vivid colour.

Superior Weathering Stability

COLORBOND® pre-painted steel offers unmatched resistance to delamination, chalking, and staining. The precisely baked-on paint finish resists peeling, chipping, and cracking under even the most demanding tropical weather conditions.



Alternative coated steel with an ordinary paint system*



COLORBOND® steel with ACTIVATE® Technology and BlueScope's proprietary paint system*

*Sample exposed to weathering for 6 years at Rockhampton, a severe UV environment



DECADES OF INNOVATION FOR ENDURING PERFORMANCE

BlueScope's unwavering commitment to research and development has established a lasting legacy; COLORBOND® steel's Clean Technology and THERMATECH® Technology have become industry benchmarks for exceptional and consistent dirt staining resistance and solar reflectance, setting the standard for high performance coated steel paint systems.

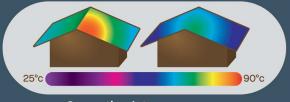
Today, the combination of these established technologies with the groundbreaking ACTIVATE® Technology elevates COLORBOND® steel's position as a holistic coated steel solution. This powerful trio ensures a cleaner exterior, cooler interior, and superior durability, making COLORBOND® steel the ideal choice for modern construction.

Clean Technology - Minimise Dirt Staining



Incorporated into COLORBOND® steel's paint system, Clean Technology prevents dirt from bonding to the surface. Every rainfall washes dirt away easily, preserving the pristine condition of your creations.

THERMATECH® Solar Reflectance Technology Reflects Heat for More Comfort



Conventional Colerbond

COLORBOND® steel is also an intelligent heat insulator. It keeps interiors cool with the help of THERMATECH® Technology, which reduces heat transmitted through the roof^. This contributes to energy conservation and enables better compliance with Green Building rating requirements^^.

[^]Compared to conventional paint system.

^{^^} Subject to building design.

THE FUTURE OF SUSTAINABLE BUILDING

As you prioritise sustainable development in your projects, COLORBOND® ULTRA steel with ACTIVATE® Technology offers significant advantages and support your green building accreditation:

- Extended Lifespan: Enhanced corrosion resistance reduces the frequency of cladding replacements, minimising new resource consumption and waste over the long term.
- Energy Efficiency: THERMATECH® Technology effectively reflects more sunlight, reducing indoor cooling needs and consequently lowering energy consumption and your utility costs.
- Resource Efficiency: COLORBOND® ULTRA steel with ACTIVATE® Technology delivers outstanding corrosion resistance while using 50g/m² less material compared to COLORBOND® ULTRA steel, thereby conserving natural resources.
- Recyclability: COLORBOND® steel is nearly 100% recyclable. At the end of its lifespan, COLORBOND® steel can be recycled and given a new life, further minimising environmental impact.

Don't just build – build for the future. Choose COLORBOND® ULTRA steel with ACTIVATE® Technology and experience the difference and greater sustainability advantages it brings to your project: the enhanced durability, energy efficiency, and recyclability minimise your project's environmental footprint while delivering long-lasting performance.



UNLEASH YOUR VISION WITH COLORBOND® ULTRA STEEL

Manufactured to meet the high standards of AS 1397 (substrate) and AS/NZS 2728 (paint coating), COLORBOND® ULTRA steel, seamlessly blends cutting-edge science with enduring aesthetics.

Explore a world of possibilities with a vibrant spectrum of shades: from bold statement colours to timeless neutrals, find the perfect shade to bring your architectural vision to life.



Light-coloured shades with high Solar Reflectance Index (SRI) values to meet the Green Building certification requirements:

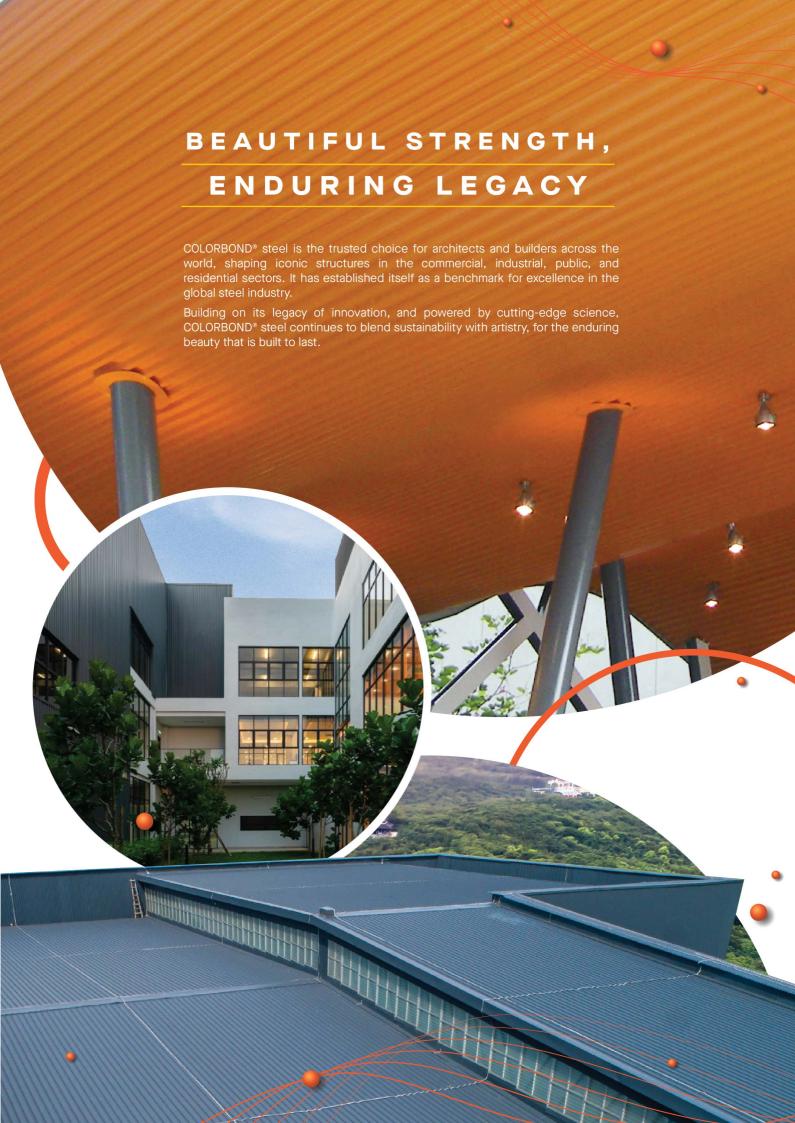


SRI is calculated using ASTM E1980-01 with Medium Convection Coeffcient (12) value reported. This data is approximate values only, may vary based on paint formulation and/or metallic coating thickness.

The colours shown in the colour chart have been reproduced to represent actual product colours as accurately as possible.

However, we recommend you to check your chosen colour against actual sample of the product before purchasing, as varying light conditions and limitations of the printing process may affect colour tones.







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