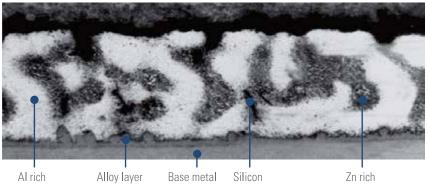
# Zincalume®





# WHAT IS **Corrosion?**

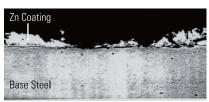
**CORROSION - IS CAUSED** BY THE DETERIORATION OF METAL DUE TO CHEMICAL REACTION AS A RESULT OF EXPOSURE TO THE ENVIRONMENT (WATER AND OXYGEN). IT IS ALSO KNOWN AS OXIDATION, CORROSION OF METAL RESULTS IN THE FORMATION OF RUST OR OXIDES IN THE CORRODED AREA



### ZN/AL COATING TECHNOLOGY (AZ150)

BlueScope proprietary metallic coating technology - ZINCALUME® is superior in corrosion performance under varied conditions, when compared with other galvanised steel.

ZINCALUME® comprises 55.0% aluminium, 43.5% zinc and 1.5% silicon. The minimum coating mass of 150 g/m<sup>2</sup> offers a high level of corrosion resistance.



Microscopic view of galvanised steel Figure A

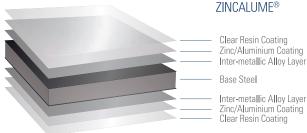


Microscopic view of ZINCALUME® Figure B

### **HOW DOES IT WORK?**

Sacrificial protection is provided by an active metal (e.g. zinc), protecting a less active metal (e.g. steel). The more active metal corrodes in preference to the less active metal will corrode (Figure A). ZINCALUME® exhibits a more complex coating structure consisting of both zinc-rich and aluminium-rich areas (Figure B). The zinc rich area provides excellent sacrificial protection, while the aluminium rich area provides durable barrier protection. It is the combination of these two characteristics that make ZINCALUME® durable and effective against corrosion.

# CROSS SECTION OF



## HOW DOES IT PERFORM?

The pictured samples were exposed for the same period of time under a similiar severe environment. The galvanised steel shows severe loss of coating and consequent red rusting of the steel substrate, but the ZINCALUME® remain in good condition.









ZINCALUME® Galvanised steel (G.I.)

Bellambi Point site, Australia

# Why ZINCALUME® from BlueScope?

HOW CONFIDENT ARE YOU OF BEING OFFERED AN EQUIVALENT PRODUCT? BENEFITS OF ZINCALUME® ONLY FROM BLUESCOPE HOW TO IDENTIFY
GENUINE ZINCALUME®,
ONLY FROM
BLUESCOPE

As a pioneer in zinc/aluminium alloy-coated technology, BlueScope is the only manufacturer of ZINCALUME® in Indonesia ZINCALUME® undergoes continuous research and development with stringent product testing in the harshest environments.

ZINCALUME® complies with Australian Standards AS1397 and Indonesia Standards SNI 4096:2007. Durability and performance is backed by warranty\*.

- High corrosion resistance
- Guaranteed material strength
- BlueScope material warranty\* of up to 25 years against corrosion perforation
- Pioneer in zinc/aluminium alloy coating technology and continually improved
- Proven customer and in-field response and support
- Nationwide availability and support

To identify genuine ZINCALUME® made only by BlueScope, pay attention to the ZINCALUME® branding text on every coil.

The brand presence is the assurance of BlueScope commitment to quality.

The quality assurance and warranty\* offered from BlueScope.

- Guaranteed minimum yield strength of 300 MPa for G300 and 550 MPa for G550
- Minimum coating mass of 150 g/m² by triple spot test
- Warranty\* against perforation for up to 25 years

New Branding Text:

"ZINCALUME<sup>®</sup> AZ150 G300 BMT X.YY made by NS BluesScope Indonesia hh:nn dd:mm:yyyy 08 **5N** SNI 4096–2007 LSPr-004-IDN"





THIS SIMPLE CHECKLIST IS YOUR GUARANTEE OF CONFIDENCE IN ZINCALUME  $^{\circ}$ 

MADE BY BLUESCOPE

TERMITE PROOF.

NON-COMBUSTIBLE.

DIMENSIONAL STABILITY.

DURABLE, STRONG AND LIGHTWEIGHT.

MEETS RELEVANT INDONESIA AND AUSTRALIA BUILDING CODES.

SUPPORTED BY BLUESCOPE WARRANTY

PRODUCT PERFORMANCE IS FIELD TESTED

### PT NS BlueScope Indonesia

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