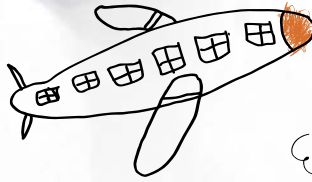


available
**August
2013**



Next generation ZINCALUME® steel with Activate™ technology

Made possible by a capital investment of over \$100 million and almost two decades of testing and development, next generation ZINCALUME® steel has set a new industry benchmark.

In order to meet the changing needs of Australia's built environment, BlueScope Steel developed next generation ZINCALUME® steel to be more durable, more efficient and more sustainable.

Patented Activate™ technology in the protective coating

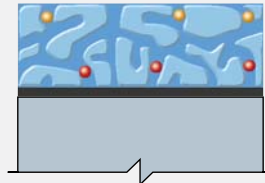
Original ZINCALUME® steel AZ150 utilises a protective alloy coating of zinc and aluminium to protect its steel base against corrosion. However, next generation ZINCALUME® steel AM125 introduces magnesium into the aluminium-zinc alloy coating, which improves galvanic protection by **activating** the aluminium. The result is more effective corrosion resistance.

BlueScope Steel research and testing has found that the addition of 2% magnesium is the optimum level for corrosion performance and coating integrity. Along with a capital investment of over \$100 million to facilitate the required manufacturing capability, BlueScope Steel can now produce next generation ZINCALUME® steel AM125 with even greater durability and a more efficient protective coating mass.

Self-sealing Activate™ technology

Protective coating

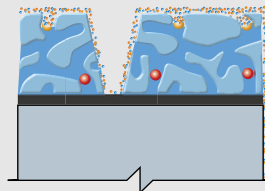
Base metal



Next generation ZINCALUME® steel AM125 features a highly efficient, active metallic coating, which provides superior corrosion resistance of the coated product via two strategically positioned magnesium compounds.

Protective coating

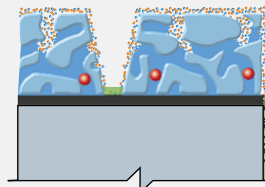
Base metal



In the presence of moisture a thin zinc aluminium oxide layer forms on the surface. The magnesium compounds make this surface oxide layer more stable and less permeable, proving a better barrier against corrosion especially at cut edges and scratches.

Protective coating

Base metal



Deeper in the metallic coating the second magnesium compound provides an additional barrier, restricting corrosion pathways to the base metal. These activate the aluminium and reduce depletion of the coating, providing greater protection for longer.

Watch how self-sealing
Activate™ technology works at

nextgenzincalume.com.au

Zincalume®



A smaller environmental footprint in all 18 LCA categories

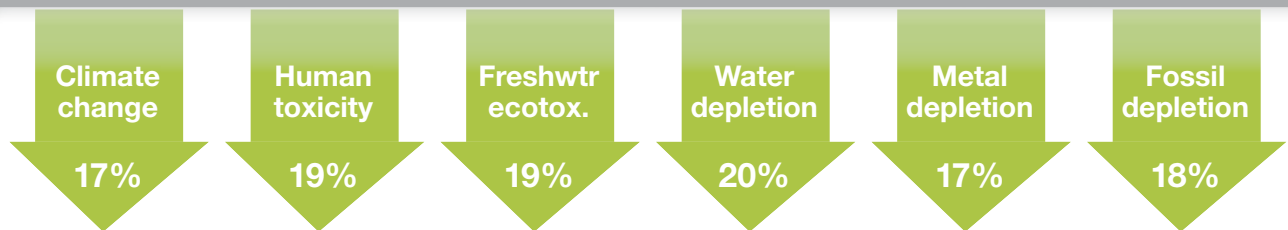
BlueScope Steel recently completed a comprehensive Life Cycle Assessment (LCA) of next generation ZINCALUME® steel AM125 encompassing:

- ISO 14040:2006 methodology
- Cradle-to-grave environmental impacts
- 3rd party peer review

Innovation in the formulation of the protective coating of next generation ZINCALUME® steel AM125 has increased product lifespan whilst using fewer metal resources. The result is a smaller environmental footprint of between 10–25% when compared to original ZINCALUME® steel AZ150, in a commercial and industrial roofing application.

The comprehensive cradle-to-grave LCA shows that next generation ZINCALUME® steel AM125 has a reduced environmental footprint, when compared to ZINCALUME® steel AZ150 across all environmental impact categories, consistent with the Building Products Innovation Council methodology.

LCA Environmental Impact Reduction, AM125 vs AZ150 ZINCALUME® steel.



To see functional unit and more results across all 18 environmental impact categories assessed visit nextgenzincalume.com.au

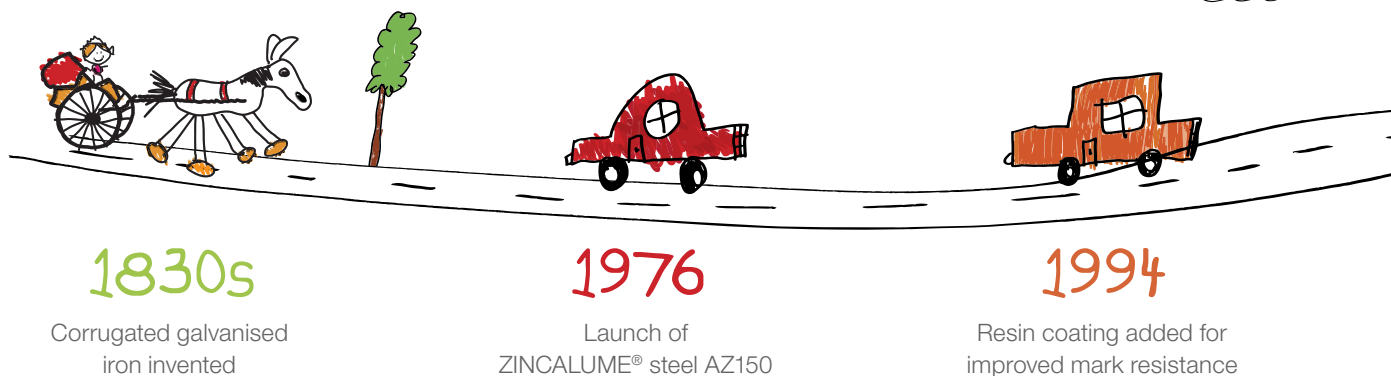
Register now for updates:

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The evolution of ZINCALUME® steel in Australia

Since 1976, BlueScope Steel has made more than 7 million tonnes of ZINCALUME® steel, enough for a 500 metre wide roof spanning from Sydney to Perth.



Comprehensive testing processes over a 17 year period

To ensure the durability and reputation of next generation ZINCALUME® steel AM125, BlueScope Steel conducted a comprehensive testing program that included a series of accelerated laboratory corrosion tests as well as a strong emphasis on real world outdoor exposure tests. A thorough and rigorous testing program ensured that the new product provided optimum performance.

Extended real world exposure testing



Purpose built test structure made from next generation ZINCALUME® steel AM125 exposed to four years of extreme conditions less than 100m from breaking surf, Bellambi NSW.



AZ150



AM125

Test panels taken from an area of a test structure, not washed by rain, show minimal edge corrosion on ZINCALUME® steel AZ150 and almost no edge corrosion on ZINCALUME® steel AM125.

Over a 17 year period, more than 2000 panels have been tested in Q-Fog cyclic testing and salt spray testing in laboratories. A further 3000 panels have been tested in 22 different exposure sites in Australia and around the world. Additionally, 50 building sites comprising a wide range of applications, as well as five purpose built test structures, have been tested in the real world, including extreme marine environments.

Finally, all test results were independently verified by the internationally recognised French Corrosion Institute (FCI).

The result is a next generation ZINCALUME® steel AM125 that is more durable, especially at the cut edge, and more resilient to scratches and scuffs during construction compared to ZINCALUME® steel AZ150.

Note: While BlueScope Steel tests ZINCALUME® steel AM125 in severe marine environments, neither ZINCALUME® steel AZ150 or ZINCALUME® steel AM125 is recommended or warranted for use in such extreme environments.

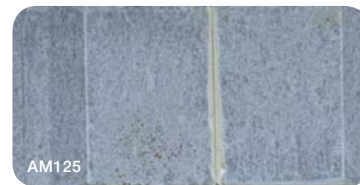
Laboratory testing



To conduct accelerated corrosion testing in the laboratory, a Q-Fog machine exposes panels to a cyclic environment of salt-laden fog, heat and humidity.

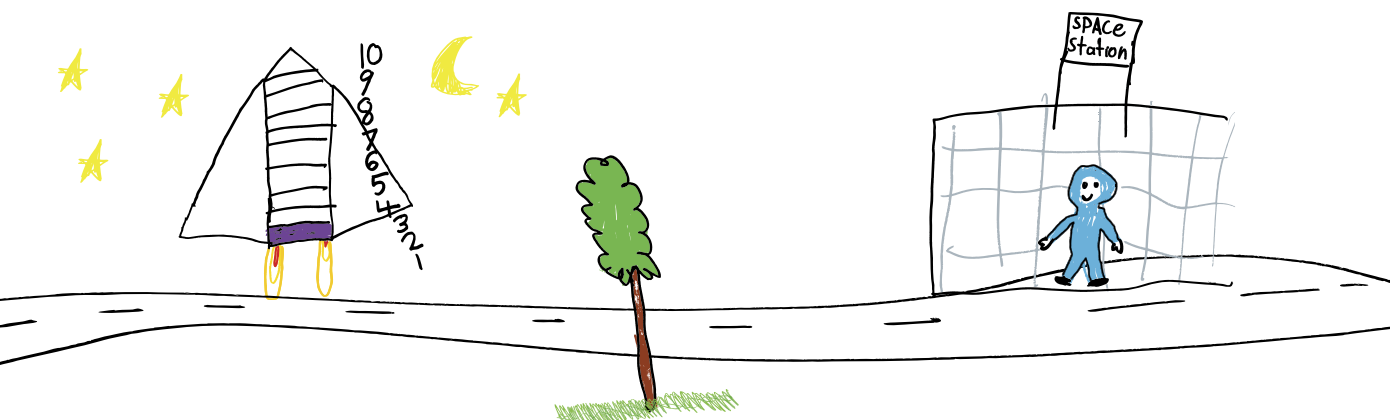


AZ150



AM125

After 14 weeks of Q-Fog testing, next generation ZINCALUME® steel AM125 demonstrates its superior resistance to corrosion in a laboratory simulation of natural atmospheric corrosion.



2013

Launch of
ZINCALUME® steel AM125

At BlueScope Steel we continually work to develop products that meet the changing needs of our built environment

Guaranteed to meet Australian Standard AS1397

Next generation ZINCALUME® steel AM125 is guaranteed by BlueScope Steel to meet Australian Standard AS1397, and the “deemed to satisfy” requirements of the Building Code of Australia (BCA) for applications such as roofing and walling.

Next generation ZINCALUME® steel AM125 has been CodeMark certified as complying with the National Construction Code 2013 (NCC) in respect of material durability and compatibility when used for gutter and downpipe systems.

ZINCALUME® steel AM125 specifications

Australian Standard: AS1397-2011 (Continuous hot-dip metallic coated steel sheet and strip)

Coating Class: AM

Coating Mass: 125g/m²

Onsite and further processing considerations

Steel detailing: no change

Sealants: no change

Ability to be recycled: no change

Laser cutting: no change

Powder coating: no change

Fasteners: no change

Compatibility with metals: no change

Fasteners: no change

While, to the naked eye, the finish of next generation ZINCALUME® steel AM125 is almost identical to ZINCALUME® steel AZ150, BlueScope Steel does not recommend the two products be used together on the same visual plane i.e. the same roof plane. This applies mainly to roofing and walling applications. Call 1800 675 230 if you require further clarification.

Specifying next generation ZINCALUME® steel AM125

Next generation ZINCALUME® steel AM125 is unique to and made only by BlueScope Steel. To ensure the use of next generation steel on your project, specify “ZINCALUME® steel AM125” by name.

Offering greater warranty periods of up to 36 years, from August 2013*

The increased corrosion performance provided by Activate™ technology allows BlueScope Steel to offer greater warranty periods for next generation ZINCALUME® steel AM125 compared to ZINCALUME® steel AZ150.

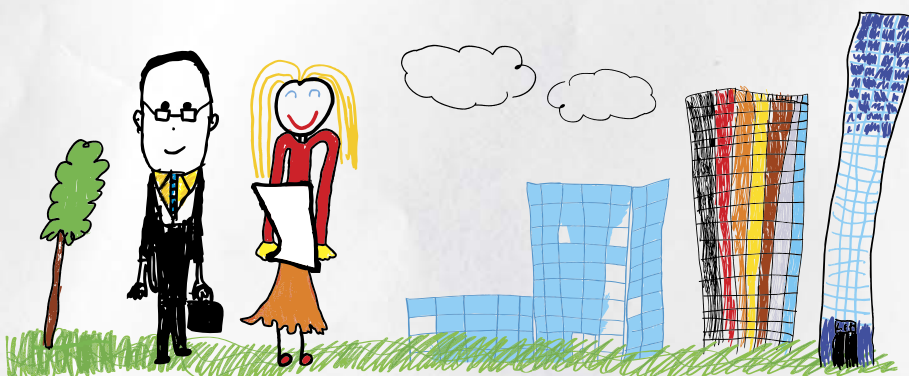
Warranties will also apply for roofing applications closer to marine environments than ever before.

Warranties for next generation ZINCALUME® steel AM125

Application	Warranty period	Increase
Roofing located 100 to 200 metres from severe marine influences	Up to 10 years	New
Roofing located 400 to 600 metres from severe marine influences	Up to 20 years	33%
Roofing located 600 to 1000 metres from severe marine influences	Up to 25 years	25%
Roofing located 1000 to 5000 metres from severe marine influences	Up to 30 years	20%
Roofing located greater than 5000 metres from severe marine influences	Up to 36 years	20%

* Warranty periods specified above for ZINCALUME® steel AM125 are only available from the official launch date in August 2013. Existing warranties for ZINCALUME® steel AZ150 will apply in relation to ZINCALUME® steel AM125 until the official launch date in August 2013. Warranties are subject to application and eligibility criteria. For full terms and conditions and to determine the eligibility of your project for the warranty visit www.bluescopesteel.com.au/warranties or call BlueScope Steel on 1800 022 999.

At BlueScope Steel we continually work to develop products that meet the changing needs of our built environment. So you can be inspired to create for generations to come. **BlueScope Steel. Next generation steel.**



nextgenzincalume.com.au

1800 675 230

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