

Product Brochure

DuraGal®

THE DIFFERENCE IS DURAGAL

Austube Mills

This is DuraGal®

When durability matters, choose DuraGal®, a trusted brand of hot-dip galvanized steel hollow sections in Australia and New Zealand.

Manufactured from high-quality steel and coated inside and out, DuraGal® delivers reliable corrosion protection designed specifically for Australia's challenging environments.

Every section features a minimum average zinc coating mass of 100g/m^2 inside and outside, and is produced using advanced HF welding technology in accordance with AS/NZS 4792. The external weld area is restored with a specialised zinc-alloy thermal spray coating, while a temporary clear polymer finish helps safe-guard the product's outer surface throughout transport and storage.

The result is a premium steel hollow section that combines strength, longevity, and compliance with National Construction Code requirements, helping you build with confidence.

Available across our Steel Hollow Section range (excluding large structural sections, minimum order quantities apply).

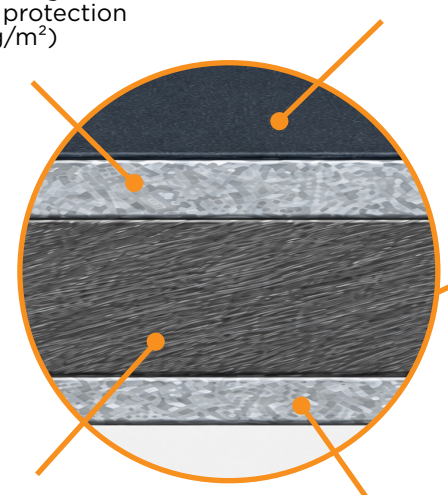
Why DuraGal®?

DuraGal® exceeds the minimum zinc coating mass requirements specified by the National Construction Code for relevant structural applications, providing engineers and specifiers with a clearly defined, standards-compliant coating specification. It provides double the corrosion protection of domestic alternatives and 1.5 times the corrosion protection of most imported materials.

You can expect a lifetime until first maintenance of at least 20 years in low corrosive (C2) environments.

Polymer
Protective organic coating for durability and corrosion resistance. 4-8µm target film thickness

Zinc (External)
Hot-dip galvanized layer providing corrosion protection (min 100g/m^2)



Steel Substrate
High-quality steel substrate for structural performance

Zinc (Internal)
Internal galvanized layer providing corrosion protection (min 100g/m^2)



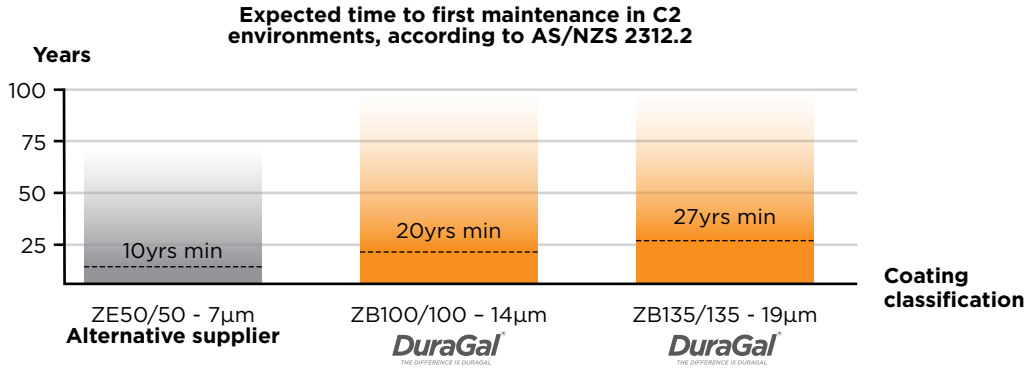
More Zinc, more protection

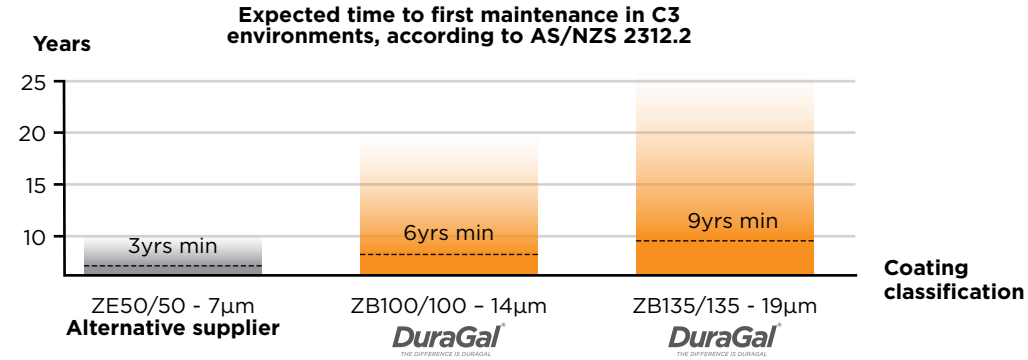
Designed for Australian and New Zealand conditions, DuraGal® provides proven long-term corrosion protection backed by the guidance of AS/NZS 2312.2, the Australian Standard for protecting structural steel against atmospheric corrosion using hot-dip galvanized coatings.

Across much of Australia and New Zealand, locations more than 50km from the coastline are typically classified as low-corrosion (C2) environments, with some sheltered coastal areas achieving similar classifications much closer to the shore.

With an average coating thickness of approximately 14µm, DuraGal®'s ZB100/100 coating delivers an expected time to first maintenance of 20 to 140 years in C2 environments. This extended service life can help reduce maintenance requirements and support lower whole-of-life ownership costs.

By comparison, sections with lighter ZE50/50 coatings, typically around 7µm thick, may provide an expected time to first maintenance of only 10 years under the same conditions.





Understanding Zinc coating mass

The designation used to describe a galvanized coating matters. Understanding how coating mass is measured helps engineers, fabricators, distributors and asset owners make clearer product comparisons and select the appropriate level of corrosion protection.

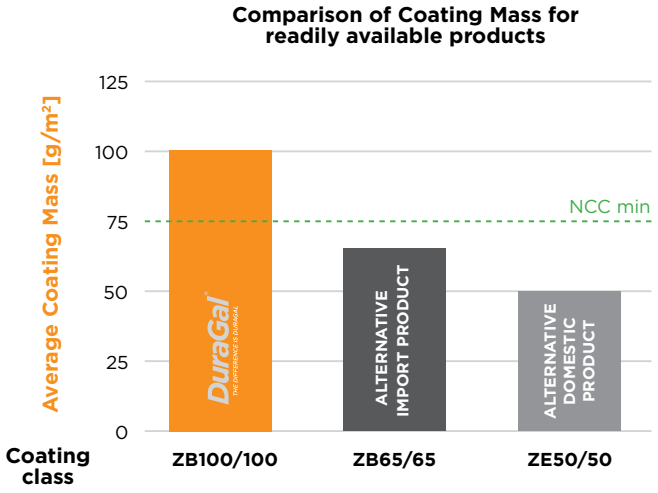
The difference between Z, ZB and ZE classifications is particularly important when comparing feed coil coating mass with the coating mass present on the individual surfaces of a finished hollow section.

Classification	Standard	What it describes	Example	What the example means
Z	**AS 1397**	Combined coating mass as sum of both sides of the steel feed coil	Z100	50g/m² of zinc per surface (100g/m² combined)
ZB	**AS/NZS 4792**	Hot-dip galvanized Zinc coating mass on each side of the finished section	ZB100/100	100g/m² minimum average coating mass per surface (200g/m² combined)
ZE	**AS 4750**	Electrogalvanized Zinc coating mass each side of the finished section	ZE50/50	50g/m² minimum average coating mass per surface (100g/m² combined)

Compliance and corrosion protection

Protection you can quantify.

- Corrosion protection is an important consideration in structural steel selection.
- The National Construction Code specifies corrosion protection requirements for structural steel members to support durability and structural reliability across defined exposure conditions. For relevant structural applications, zinc coating mass forms part of the assessment of a coating system's suitability.
- DuraGal® ZB100/100 provides a minimum average zinc coating mass of 100 g/m² per side.
- The available imported and domestic alternative comes with a coating mass of 50g/m² or 65g/m² and is therefore lower than the minimum requirement outlined by the NCC.



Why coating mass matters.

- Zinc protects steel by acting as a sacrificial coating. When exposed to the environment, the zinc is preferentially consumed while continuing to protect the underlying steel.
- Over time, environmental conditions progressively reduce the zinc coating at measureable rates. The initial 1 year corrosion rate of zinc is specified as 0.1-0.7 µm for low corrosivity and 0.7 to 2.1µm for medium corrosivity environemnts (see AS/NZS 2312.2). The rate at which this occurs depends on factors including moisture, airborne contaminants, salt exposure, humidity and the surrounding micro-environment.
- The amount of zinc initially present, therefore, matters. A greater zinc mass provides a larger protective reserve before the coating is consumed to a point where maintenance or additional protection is required.
- A ZE50/50 coating with an approximate coating thickness of 7µm may provide an expected time to first maintenance of 10 years in a C2 environment. By comparison, a ZB100/100 coating with an approximate coating thickness of 14µm may provide an expected time to first maintenance of at least 20 years in the same environment, provided cut or welded surfaces are appropriately repaired.

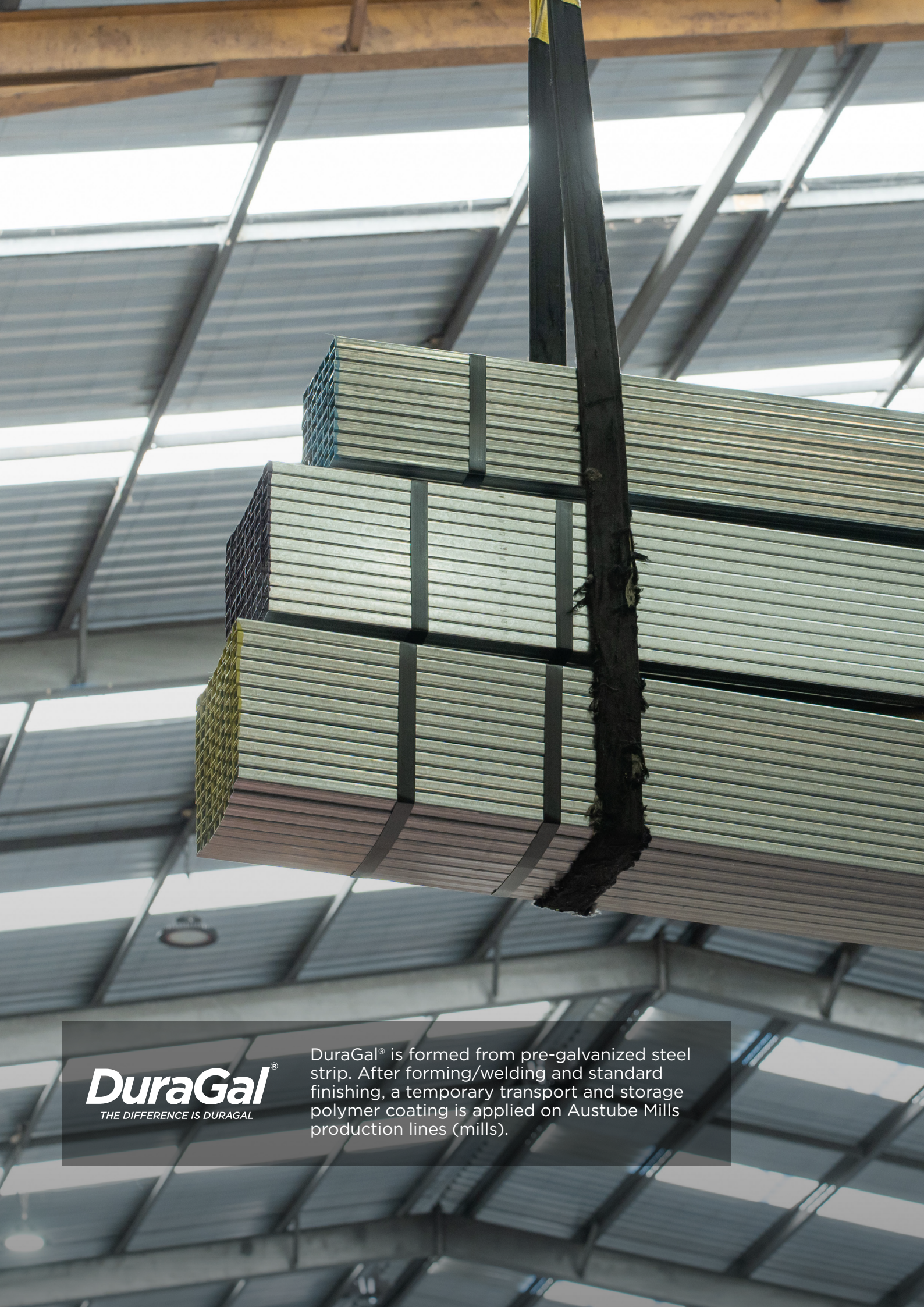
From coating feature to project benefit.

Technical feature	Performance benefit	Project value
Higher zinc coating mass	Greater sacrificial protective reserve	Longer corrosion protection
Zinc coating inside and outside	Protection across both tube surfaces	Greater confidence in hollow section durability
Defined coating classification	Measurable coating performance	Clearer specification and product comparison
Increased time to first maintenance	Reduced maintenance intervention	Lower lifecycle exposure
Documented technical guidance	Greater product understanding	Reduced specification and application uncertainty

Corrosion protection is about more than appearance.

- A galvanized surface may look similar when products first arrive on site. The true difference becomes more important over time.
- Coating mass influences how much sacrificial protection is available throughout the life of the structure.
- That means corrosion protection should not be assessed only by appearance or initial material price. It should be considered as part of the long-term performance of the asset.

DuraGal® is not just coated for today. It is engineered for the project lifecycle.



DuraGal®

THE DIFFERENCE IS DURAGAL

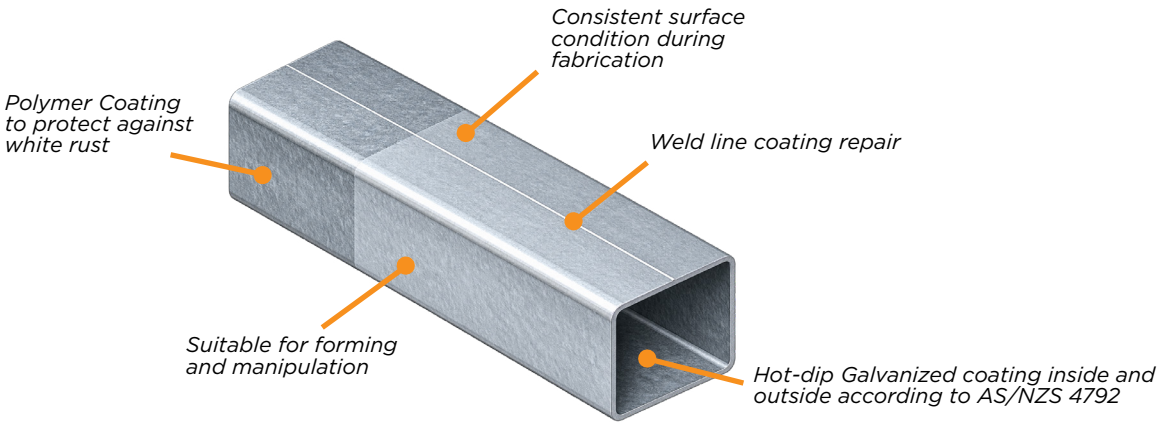
DuraGal® is formed from pre-galvanized steel strip. After forming/welding and standard finishing, a temporary transport and storage polymer coating is applied on Austube Mills production lines (mills).

Fabrication and welding

Protection without compromising fabrication.

For fabricators and manufacturers, corrosion performance is only part of the equation. Steel must also be practical to cut, form, handle and weld. DuraGal® combines a smooth, even galvanized coating with detailed technical guidance developed to support fabrication and welding. The result is a structural hollow section designed to provide corrosion protection while remaining practical to work with in the workshop.

DuraGal® fabrication characteristics.



A consistent surface for consistent fabrication.

The thin, even coating of zinc provides a smooth surface that supports common fabrication processes. A consistent surface condition helps provide predictability during handling, preparation and welding.

Welding processes covered by Austube Mills' technical guidance.

Process	Common description
MMAW	Manual Metal Arc Welding or 'Stick'
GMAW	Gas Metal Arc Welding or 'MIG'
Pulsed GMAW	Pulsed manual and robotic welding
Spray transfer	GMAW spray transfer process
FCAW	Flux Cored Arc Welding

Welding consideration	Guidance available
Joint preparation	RHS, SHS and CHS joint preparation
Weld sizing	Guidance on selecting and controlling weld size
Machine settings	Indicative process settings
Welding gases	Gas comparisons and considerations
Spatter	Spatter management and surface behaviour
Welding fume	Fabrication and fume considerations

Reduced spatter adherence.

The DuraGal® surface treatment can help reduce spatter adherence. Where spatter remains after welding, much of it can be removed more easily from the surface. This can assist fabricators seeking a cleaner result and help reduce unnecessary post-weld surface work.

Welding galvanized steel?

- Questions around welding galvanized products are often driven by uncertainty around zinc behaviour, fume exposure and welding procedures.
- The correct response is not an assumption. It is technical guidance, appropriate welding procedures and suitable workplace controls.
- DuraGal® hollow sections can be readily welded when suitable procedures, settings and controls are followed. Structural welding must comply with applicable design standards, welding standards, workplace health and safety requirements and project-specific welding procedures.

Protection and fabrication performance should work together. With DuraGal®, they do.

Value across the project

Protection that delivers value at every stage.

DuraGal® is used across construction, manufacturing, transport, agriculture and engineering because its value extends beyond the coating. It combines structural performance, documented zinc mass, corrosion protection, fabrication capability and technical support in one clearly defined steel tube solution. From roof trusses and verandas through to fabricated frames, transport equipment, rural infrastructure and commercial structures, DuraGal® supports a broad range of structural and manufactured applications.

DuraGal® applications by market are:

Construction
Roof trusses, verandas, elevated flooring, posts and beams

Agriculture
Cattle yards, fencing, shade structures and rural infrastructure

Manufacturing
Fabricated frames, equipment structures and steel assemblies

Commercial
Warehousing, structural frames and general fabrication

Transport
Caravan chassis, bus frames, livestock transport and equipment frames

Engineering
Custom structures, supports and fabricated components

Stakeholder values.

- **Engineers and specifiers.**
  Engineers and specifiers need confidence that the products identified in a design can deliver the required performance. DuraGal® provides engineers and specifiers with a clearly defined zinc coating mass that exceeds National Construction Code requirements for relevant structural applications and complies with recognised Australian and New Zealand Standards.

Specification requirement	DuraGal® position
Product standard	AS/NZS 1163, AS 1074, AS 1450
Zinc coating standard	AS/NZS 4792
Coating mass	Defined by coating class
Environmental exposure	Supported by corrosion performance guidance in line with AS/NZS 2312.2
Product identification	Line marking and technical documentation
Technical support	Austube Mills product and application expertise

- **Fabricators and manufacturers.**
  Fabricators need steel that performs consistently through cutting, forming, handling and welding. DuraGal® provides a smooth, even surface, clearly defined coating performance and detailed welding guidance to support fabrication.
- **Asset owners and developers.**
  For an asset owner, the cost of corrosion extends beyond the purchase of the original material. Inspection, maintenance, repainting, access and downtime can all contribute to the total cost of owning a structure. A higher zinc coating mass can support longer corrosion protection and a longer time before maintenance intervention.
- **Distributors.**
  Distributors need product clarity to provide customer confidence. DuraGal® is a recognised brand, backed by technical resources and clearly defined coating mass, standards compliance and corrosion performance.

Product	Coating performance	Application focus
DuraGal® ZB100/100	100 g/m² minimum average zinc coating mass per side	Broad structural hollow section applications
DuraGal® ZB135/135	135 g/m² minimum average zinc coating mass per side	Selected applications requiring greater corrosion protection
Higher coating classes	Up to ZB225/225 supplied for selected applications	Higher-exposure applications, subject to suitability and availability

DuraGal®

THE DIFFERENCE IS DURAGAL

Austube Mills

Contact

1800 281 424

info@austubemills.com

Visit our website

Scan for resources

Scan for case studies

austubemills.com.au

Disclaimer:

This publication has been prepared by Austube Mills Pty Ltd as a general guide only. While Austube Mills has taken reasonable care to ensure that the information contained in this publication is accurate and current as of the date of issue, the information is general in nature and does not account for the specific circumstances, application, design requirements, or environmental conditions of any individual project. Product specifications, technical data, coating availability and performance information are subject to change without notice. Users should confirm the currency and suitability of all information, applicable standards, National Construction Code requirements and product availability before relying on this publication. Where appropriate, users should obtain independent professional engineering, technical or other specialist advice. Indicative corrosion performance and time-to-first-maintenance information are provided as guidance only. Actual performance may vary depending on environmental exposure, micro-environment, detailing, fabrication, installation, storage, handling, maintenance and other project-specific factors. Unless required by law, Austube Mills does not accept responsibility for any loss, damage, cost, or consequence arising from the use of or reliance on the information contained in this publication, or from any omission or error. This publication is not an offer to trade and does not form part of the terms of any transaction. © 2026 Austube Mills Pty Ltd. All rights reserved. DuraGal® is a registered trademark of Austube Mills Pty Ltd. Austube Mills and associated product names, logos and trademarks are the property of Austube Mills Pty Ltd or their respective owners. No part of this publication may be reproduced, distributed or transmitted without the prior written permission of Austube Mills Pty Ltd.