

ZALMAX™

ZINC-ALUMINIUM PIPE & HOLLOW SECTIONS

Steel & Tube's new Zalmax™ Zinc-Aluminium-Magnesium (Zn-Al-Mg) coated high strength dual grade pipe (350LO-AS/NZS 1163 & AS 1074) and RHS/SHS (350LO AS/NZS 1163) offers new-generation coating technology compared to traditional galvanised products, providing superior scratch and corrosion resistance for harsh end uses or severe environments.

Supplied with a standard coat weight of ZM200, a range of coatings from Z120 to Z275 are available on request. There is a superior cost efficient Zalmax™ solution, whatever the end use or application.

Made from Zinc (Zn), Aluminium (Al) and Magnesium (Mg) coated coil, the advanced Zalmax™ coating system provides corrosion performance which eliminates the requirement for post hot-dip galvanising of standard mill finished ("black") steel. Zalmax™ (ZM200) pipe and hollows (RHS/SHS) have a minimum average coating mass of 100g/m² inside which completely protects the surface of the steel.

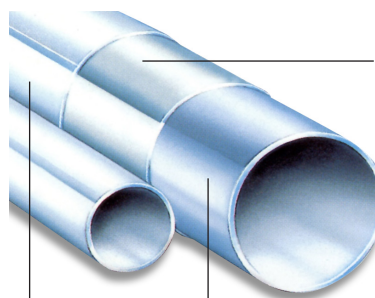
The unique Zn/Al/Mg coat creates two alloy layers that gives Zalmax™ pipe and hollows both galvanic and passive protection from corrosion. The inner layer forms a rich iron-aluminium zinc alloy that acts as a passive barrier for the steel from the corrosive elements in the environment. The outer layer of zinc and aluminium provides the benefit of a smoother and homogenous coating compared to hot-dipped zinc finishes whilst providing the traditional galvanic sacrificial protection.

Independent international research and studies of external atmospheric field conditions have shown that the zinc – particularly with a 5% aluminium alloy inclusion – provides two to three times the corrosion protection of a hot-dipped galvanised surface due to the unique 95% Zn / 5% Al-Mg coating.¹

The superior Zalmax™ coating system enables a thinner layer of protective coating to be applied, creating a highly ductile and formable product less likely to crack under deformation and to allow corrosive elements to attack the steel.

The even Zinc-Aluminium surface finish also improves weld penetration with less dilution of zinc into the weld pool providing an overall better welding experience compared to traditional galvanised products. This produces less weld spatter and fumes, making it safer and easier to weld.

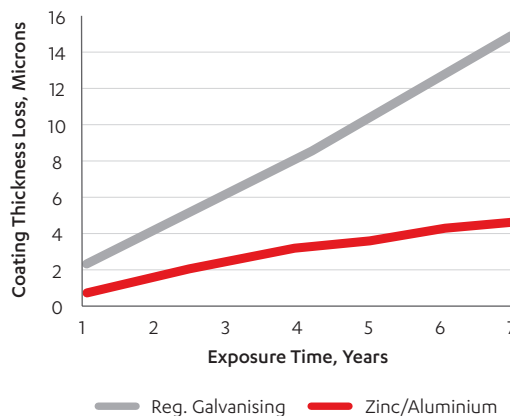
- + Excellent coating adhesion
- + Superior resistance to corrosion and abrasion
- + "Self-Healing" oxide coating
- + Strong ductility & elasticity - reduced surface cracking
- + Environmentally friendly



> Surface Barrier Coat (8 microns) > Coil Cleaned Surface Class 3 Blast

- > Coil coated both sides in 95% Zinc / 5% Aluminium and Magnesium continuous hot dip coating process
- > Pipe cold rolled and ERW welded
- > Zn/Al thermal coating spray weld repair

Coating Thickness Loss Study in Microns (HDG v Zn/Al)



Source: Coating Thickness Loss in a Marine Environment - 'GALFAN® Product Manual, ILZRO, June 1993

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Disclaimer: This information and data should be used as a guide only, for exact applications you should engage the services of a qualified engineer.

With a smooth even coat, Zalmax™ is an easy option for all paint finished fabrications, providing a superior result and the added benefit of an additional corrosion protection barrier for the steel if scratched, ideal for harsh end uses or demanding environments.

Quality counts! Zalmax™ pipe and RHS/SHS are made to the AS/NZS standards, by an industry leading third-party accredited mill. All product is certified and traceable, to ensure you receive the safest and highest quality hollow section every time.

Experience the Zalmax™ advantage in a variety of uses such as scaffolding and fencing, agricultural products, shelters and greenhouses, gates, trailers and other manufactured products or fabricated structures.

Provide your engineered solution a point of difference, contact Steel & Tube today for more information on Zalmax™ Pipe and Hollows.

Try the Zalmax™ advantage today!

- > The (Zn/Al/Mg) galvanised, smooth, even ductile coating provides a superior finish
- > Provides 2 – 3 times the life (corrosion protection) of traditional Hot Dipped Galvanised (HDG) product²
- > No preparation required for painted applications
- > No costly outsourcing to galvanisers of black RHS / SHS / Pipe
- > Versatile Dual Grade specification for pipe (structural AS/ NZS 1163 and reticulation (AS 1074)
- > Converting to high grade Zalmax™ 350L0 Pipe provides an opportunity to drop wall thickness, meaning lighter fabrications, less carbon, and more metres per tonne in application.³

Product size	2mm	2.5mm	2.6mm	3mm	3.2mm	3.6mm	4mm	5mm
RHS / SHS								
25 x 25mm		P0089010						
35 x 35mm		P0089011						
40 x 40mm		P0089012		P0089000			P0089019	
50 x 25mm		P0089013						
50 x 50mm		P0089014		P0079435			P0089020	P0089024
65 x 65mm		P0089015		P0089017				
75 x 50mm				P0079436			P0089004	
75 x 75mm		P0089016		P0089001			P0089021	P0089006
100 x 100mm				P0079437			P0089022	P0089018
100 x 50mm				P0079439			P0089005	P0089007
125 x 75mm				P0089003			P0089023	P0089008
150 x 50mm				P0079438				P0089009

PIPE								
25NB x 3.2	High grade Zalmax™ 350L0 Pipe enables the opportunity to drop to a light wall thickness pipe for some end use applications ³				✓			
32NB x 3.2					✓			
40NB x 3.2					✓			
50NB x 3.6							✓	
65NB x 3.2					✓			
65NB x 3.6							✓	
80NB x 3.2					✓			
100NB x 3.6							✓	

N.B: Indicative range – other sizes (e.g. 1.6mm, 3.5mm) are Price On Application

1. GalvInfo Center – ‘GALFAN Product Manual’ (ILZRO), June 1993
 2. ‘Pre-Hot-Dip 5% Al-Mg-Zn AMZCOT’ Product Guide, E-United Group
 3. Zalmax™ 350L0 Pipe has higher guaranteed strength compared to AS1074 pipe, allowing lighter weight pipe to be used in appropriate circumstances

Example applications

