

Data Sheet – FENCESPEC-GAL®

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General Description

FENCESPEC-GAL® is cold-formed structural hollow Pipe and Tube made from pre-galvanized coated steel. It is manufactured using the ERW (Electric Resistance Welded) process, external weld upset is removed and the zinc coating along the weld zone is restored using hot metal spray.

The product meets the requirements of AS 1450 – Steel tubes for mechanical purposes.

Certification

The FENCESPEC-GAL® product range is made by Orrcon Manufacturing, an ISO9001 accredited business. FENCESPEC-GAL® is manufactured to comply with the requirements of AS 1450 and produced from quality hot dipped galvanized steel supplied by BlueScope Steel Australia. A statement of product conformity can be provided on request.

Coating

Designation: AS 1397, achieving minimum zinc coating thickness of 14 micron per side and is equivalent to ZB100/100 coating class as per AS/NZS 4792.

Coating has a spangled appearance and has a consistent and uniform thickness. Coating performance is guaranteed to maintain adhesion at a minimum 1t bend radius (180° bend along L-axis).

Durability: Extra long term durability may be achieved when exposed to a low atmospheric corrosive environment. The weight of the zinc coating provides medium term durability in medium to high atmospheric corrosive environments, such as protected coastal locations where surfaces are rain-washed to rinse off salt. Refer to AS/NZS2312.2 for further details.

Atmospheric Category (AS 2312)	Durability (years)
C1 Very Low	Extra long term: 25+
C2 Low	Extra long term: 20+
C3 Medium	Medium to long term: 7 to 20
C4 High	Medium term: 3 to 7
C5 Very High	Short term: up to 3

Durability is the estimated time to first major maintenance within the service life of the structure to restore the protection to the base material and is not subject to aesthetic considerations.

Other factors that influence durability, include: design, local variations in environmental conditions and non-atmospheric exposure conditions, such as chemicals, soil and concrete. Additional protective measures, such as organic coating and/or routine maintenance may be required, subject to: the specified design, aesthetics and service life requirements of the structure.

Available Product Range



Sizes available	Pack Quantity
160D	1.2 217
190D	1.2 169
38 x 25.4	1.2 70
38 x 25.4	1.5 70
25.4 x 25.4	1.2 100
30 x 30	1.5 64
40 x 40	1.5 35
50 x 50	1.5 25
65 x 65	1.5 16

MOQ's apply.
Standard pack configurations.
ETA at time of offer.

Typical Applications

Orrcon Steel's FENCESPEC-GAL® Pipe and Tube is suitable* for general purpose mechanical applications, including;

- ▶ Agricultural applications
- ▶ Fencing and gates
- ▶ Traffic and pedestrian control
- ▶ Walkways
- ▶ Stairways
- ▶ Handrails
- ▶ Park benches
- ▶ Bench frames
- ▶ Wheel barrows and trolleys
- ▶ Letter boxes supports

*Suitability is determined by the application of the product, the environment and the size and specifications of the pipe and tube.

Mechanical Properties

Typical Mechanical Properties	Specification (min)
Yield Strength	240 - 350 MPa
Tensile Strength	340 - 390 MPa
Elongation based on 5.65 $\sqrt{S_0}$	27%

Chemistry

Element	C	Si	Mn	P	S	CE
Specification (max %)	0.10	0.02	0.45	0.025	0.03	0.20

*Coil is manufactured by BlueScope to AS1397, at a specified Z200 coating class.

Tolerances – Complies with AS 1450, key measures shown

Attribute	Specification
Length	-0, +100mm
Thickness	± 10%
External Dimensions	≤ 50mm; ± 0.2mm > 50mm; ± 0.3mm
Straightness	≤ Length (in mm) / 600
Squareness (RHS/SHS)	Adjacent sides 90° ± 2° maximum
Twist	≤ 2 + 0.5mm/m length
End Condition	Shear cut with dimple

Weldability

BlueScope steel coil confers guaranteed zinc-coating performance to AS1397 and steel weldability to group number 1, as per AS/NZS 1554.1.

Additional care is needed when welding pre-galvanized zinc coatings to manage fume exposure and weld quality. Refer Weld Australia (formerly WTIA) Technical Notes: TN 07 Health and Safety in Welding and TGN-BC-03 Welding of Mill Applied Galv Steel Sections.

Contact us for more about this product

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For FENCESPEC-GAL® availability please contact your Orrcon Steel Manufacturing sales representative.

Please note that not all products are available in all regions.

Please ensure you have the current data sheet for this product.