

Case Study

Coca-Cola Amatil Distribution Centre

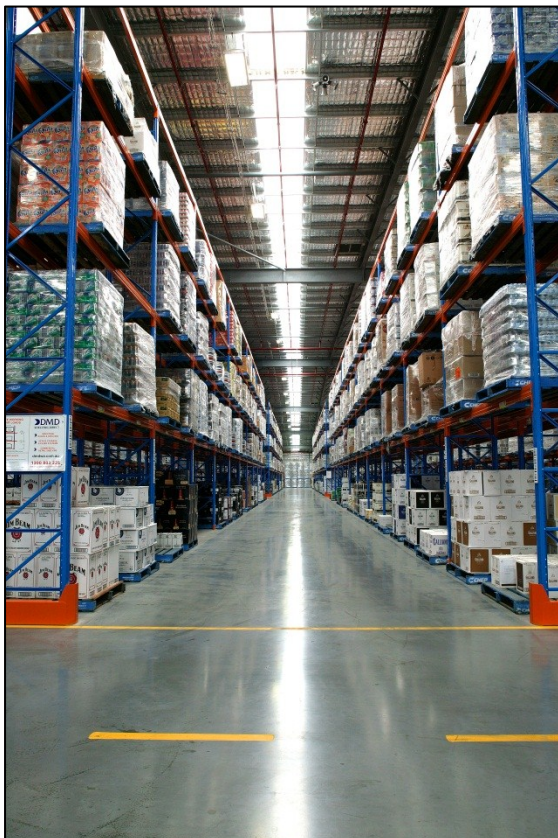


Sustainable Design

This project involved the complete design, documentation and construction of a 40,000sqm warehouse, 6,000sqm of unloading bay canopy, 2000sqm truck parking canopy with 12-metre cantilever rafters, entry/exit canopy, a battery room under the warehouse roof and office. It utilises Australian steel throughout from portal frame to cladding and an innovative

steel fibre reinforced concrete slab. Sway portal frames were used at 21-metre centres with rafters spaced 10.5 metres apart. Stramit Exacta® purlins were utilised to span the 10.5-metre bays, reducing conventional purlin weight over the entire warehouse area. As the building is 200 metres wide, it normally would have required three extra purlins on either side of the ridge, but a Stramit FarLap® roof sheeting joint was chosen to eliminate that requirement by giving additional purlin length at each sheet joint.

Externally the building is predominantly covered in Colorbond® sheeting with brand colours incorporated throughout the building internally and externally. Colorbond® blades are situated next to the office windows to form a decorative façade and provide shading.



Practical completion was achieved two weeks ahead of schedule and the project was the winner of the Australian Steel Institute (ASI) 2012 WA 'Steel Clad Structures' award.

Hot Dip Galvanizing

The external loading bay features a hot dip galvanized 12-metre cantilevered sunshade providing an extremely durable,

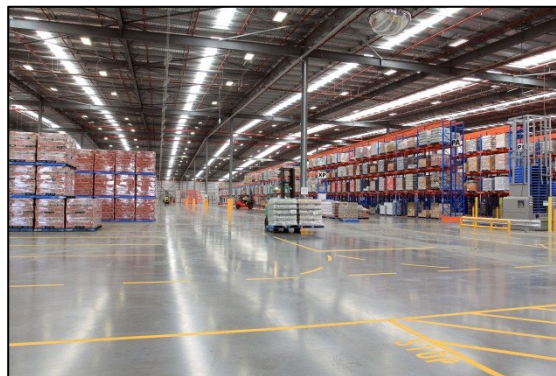
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abrasion resistant, and year round protection from the elements.



and Galvanizers Association of Australia



Acknowledgements

Designer: Gavin Construction

Structural Engineer: E-Tec Consultants

Steel Fabricator: Fremantle Steel

Galvanizer & Coatings: Fero Group

Text: Australian Steel Institute (Alan Marshall)

Eight Reasons to Choose Hot Dip Galvanizing

1. No hold ups due to weather – steel can be galvanized in any weather conditions
2. Speed – modular design compatibility to speed up construction
3. Tough coating system – reduces transport damage & minimises on-site repairs
4. Inbuilt durability – minimises in-service damage in the transport environment
5. Withstands UV – the surface is immune to damage from the extreme Australian sun
6. Superior corrosion protection – provides initial and lifetime cost savings
7. Aesthetics – natural good looks
8. Sustainable – Zinc and steel are 100% recyclable

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