

Orrcon Steel tube made with REDCOR® weathering steel is manufactured for Australian outdoors

Orrcon Steel tube made with REDCOR® weathering steel is suited to many outdoor environmental structures, such as landscaping, sculptures, playgrounds and more, specified and certified by design professionals

Weathering steel is a strong and sustainable alternative to timber and other building materials for outdoor architectural features. It's an attractive product for a vast range of commercial, municipal and domestic applications including: landscaping, sculptures, parks and playground amenities. Orrcon Steel tube made with REDCOR® weathering steel has enhanced corrosion resistance providing generally lower maintenance costs.

BlueScope have already established that REDCOR® weathering steels are likely to improve the service life, lower construction and ongoing maintenance costs, when used in the appropriate environment and designed and detailed correctly*. Making a complimentary building grade tubular hollow section from this Australian made steel extends creative possibilities for landscape architects and specialist outdoor designers.

There are many environmental performance advantages of Orrcon Steel tube made with REDCOR® weathering steel

Australian Made

- ▶ A high quality product, backed by an Australian manufacturer who provides in-depth technical support, stock availability and local employment
- ▶ Compliant to Australian structural steel and welding standards
- ▶ BlueScope REDCOR® coil supply and Orrcon Steel tubular supply

Quality Product

- ▶ Made with trusted Australian made BlueScope steel
- ▶ Manufactured to comply with dimensional and mechanical property limits of AS/NZS 1163 Grade C350L0
- ▶ Quality Assurance and technical details are available from Orrcon Steel to support engineering and building certification documentation

Product Benefits

- ▶ Good formability for bending using standard methods
- ▶ Has specification and aesthetic consistency with other REDCOR® weathering steel products
- ▶ Electric Resistance Welding process produces a weld seam with complimentary material and surface finish characteristics, creating a consistent overall patina and colour throughout the weathering cycle

*Suitability is determined by the application of the product, the environment and the size and specifications of the Orrcon Steel tube made with REDCOR® weathering steel.

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Sizes available in SHS

65 x 65 x 2.5	6,500mm
75 x 75 x 2.5	8,000mm
89 x 89 x 2.5	12,000mm
100 x 100 x 2.5	8,000mm

MOQ and extra apply for non-standard length. Standard pack configuration only. Other sizes may be available upon enquiry.

Typical Applications

Orrcon Steel tube made with REDCOR® weathering steel is suitable for structural and general purpose applications, including;

- ▶ Streetscapes
- ▶ Shopping precincts
- ▶ Public parks
- ▶ Constructed wetlands
- ▶ Play spaces
- ▶ Cycle pathways
- ▶ Sporting facilities
- ▶ Wayfinding and sign structures
- ▶ Gates and fencing
- ▶ Garden features
- ▶ Street furniture
- ▶ Letterbox supports
- ▶ Seating supports
- ▶ Urban Artwork



Orrcon Steel tube made with REDCOR® weathering steel

REDCOR® weathering steel is highly suited to specific environmental conditions, but there are some limitations

Formulation of the stable oxide layer, commonly known as the patina, is only developed when exposed to alternating periods of wet and dry in particular environments. Extreme environments, at both ends of the spectrum, won't produce a sufficient cycle of weathering to form a satisfactory patina.

Marine, heavy industrial, submerged and buried situations are relatively obvious corrosive environments that aren't suitable for Orrcon Steel tube made with REDCOR® weathering steel. These applications many have high salt deposition rates, high concentrations of sulphides or be in areas of very high rainfall and humidity.

At the opposite end, Orrcon Steel tube made with REDCOR® weathering steel is not recommended in applications or at locations where wet and dry cycles do not regularly occur. If the patina doesn't form to produce a sufficient corrosion barrier, durability will be only be similar to that of standard uncoated steel.

Refer to the BlueScope Technical Bulletin 26, June 2019, Revision 7 "REDCOR weathering steel" for a more comprehensive overview of weathering steel limitations.

Avoid run-off staining

The REDCOR® weathering steel cleverly gains surface protection through oxidisation, with run-off from each wet cycle having a discolouring affect on surrounding building materials like concrete. This can be mitigated through good design and thoughtful placement within the built or natural environment.

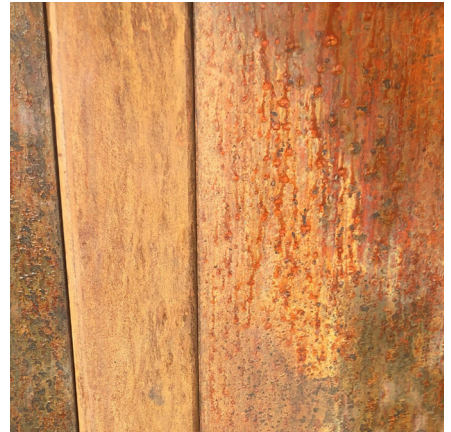
Important design considerations when detailing Orrcon Steel tube made with REDCOR® weathering steel

Correct detailing is essential when using any form of REDCOR® weathering steel to ensure there are no corrosion issues with the structure being build from weathering steel and that staining of the surrounding areas does not occur.

In all detailing work it is important that the structure has good ventilation to enable the proper development of the patina.

Eliminating entrapment points, where moisture and debris accumulates, is a very important design consideration. Controlling run-off with diversion methods and sloping surfaces are also design methods to achieve the best results.

Refer to the BlueScope Technical Bulletin 26, June 2019, Revision 7 "REDCOR weathering steel" for a more comprehensive overview of design considerations for weathering steel.



A sustainable choice

Weathering steels can contribute to improving the sustainability of a structure by avoiding the need to paint (and repaint) structures.

Of course, steel also doesn't rot and won't be compromised by termites, eliminating chemicals associates with treated timber from the natural environment.

BlueScope's Environmental Product Declarations (EPDs) respond to market demands for credible, product-specific environmental information from building owners, architects, design engineers and sustainability specialists who are at the forefront of developing a better built environment for Australia.



REDCOR® is a registered trademark of BlueScope Steel Limited.
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For availability of Orrcon Steel tube made with REDCOR® weathering steel please contact your Orrcon Steel representative

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