



Building something great

Lower carbon concrete products

For all types of structures



Residential



Commercial



Multi-residential



High-rise



Civil



Infrastructure



A lower carbon concrete product for every application

Boral's range of lower carbon concrete products will help you achieve your sustainability, engineering and architectural goals.

Boral Concrete's Lower Carbon Concrete (LCC) products can be used for all types of structures including:

- houses
- commercial buildings
- multi-residential buildings
- high-rise buildings
- civil projects, and
- infrastructure projects.

By matching the engineering properties of each product with the structural requirements, the carbon footprint of the project can be reduced for the optimal cost.

Traditional lower carbon concrete products have low early age strength and may have higher drying shrinkage which makes them less desirable for many applications. In particular they are unsuitable for precast elements and post tensioned slabs.

Boral's Lower Carbon Concrete (LCC) products include products with good early age strength and superior engineering properties. They can be used for precast and post tensioned slabs so there is no compromise to the construction schedule and engineers can take advantage of the superior drying shrinkage properties.

Boral has three product ranges ENVIROCRETE®, ENVIROCRETE® PLUS and ENVISIA®. ENVIROCRETE® concrete, is a traditional lower carbon concrete product, ENVIROCRETE® PLUS has better early age strength and drying shrinkage properties and ENVISIA® concrete has the best early age strength and drying shrinkage properties.

ENVISIA® concrete also has a light colour and exhibits a very good appearance in an off-formwork finish.

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ENVIROCRETE® products

Are suitable for all general applications where good early age strength and low drying shrinkage are not required.



- Low portland cement.
- Low embodied carbon.
- General applications.
- Suitable for projects targeting a GBCA¹ or ISC² rating.

ENVIROCRETE® PLUS products

Have good early age strength and can be used for some post tensioned applications. They also have good drying shrinkage characteristics which will comply with the shrinkage requirements in most engineering specifications.



- Low portland cement.
- Low embodied carbon.
- Low drying shrinkage.
- Good early age strength, suitable for most standard post tension applications.
- Suitable for projects targeting a GBCA¹ or ISC² rating.

ENVISIA® products

Have excellent early age strength and drying shrinkage characteristics. They can be used for all standard post tensioned concrete applications and their low shrinkage characteristics provides engineers and architects with more design options. They have a light colour which provides architectural benefits, and they have excellent resistance to chloride ingress making them suitable for marine environments.



- Low portland cement.
- Low embodied carbon.
- Very low drying shrinkage.
- Good early age strength, suitable for all standard post tension applications.
- Very low drying shrinkage.
- Excellent resistance to chloride ingress.
- Light colour provides architectural benefits.
- Suitable for projects targeting a GBCA¹ or ISC² rating.

Environmental properties

Reduction in portland cement ^{3, 5}	30% - 70%	45% - 70%	50% - 70%
Reduction in embodied carbon ^{4, 5}	30% - 55%	40% - 55%	45% - 55%

Engineering and durability properties

Early age strength	●	● ●	● ● ●
Drying shrinkage	●	● ● ●	● ● ● ●
Durability in a marine environment	● ●	● ● ●	● ● ● ●

¹ Green Building Council of Australia (GBCA). ² Infrastructure Sustainability Council (ISC). ³ Using the reference case from the GBCA Design and As-Built v1.3 rating tool. ⁴ Using a reference case calculated from the GBCA upfront embodied carbon emissions calculator for concrete with GP cement. ⁵ The minimum reduction in portland cement and embodied carbon will vary depending on the region. The embodied carbon contents for these products are provided for each region in our Environmental Product Declarations which can be downloaded from boral.com.au/EPDs. ⁶ The ranges given for the environmental properties do not apply to Tasmania and the Northern Territory. Contact the local Boral office for environmental properties for these regions.

boral.com.au



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Boral Sustainability Team product support

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The information in this product sheet and any advice given should be viewed as a guide only. Boral recommends obtaining technical advice prior to construction. To ensure the information you are using is current, Boral recommends you review the latest building information available on the Boral website. Boral, the Boral logo, ENVISIA®, ENVIROCRETE® and ENVIROCRETE® PLUS are trade marks or registered trade marks of Boral Limited in Australia, other countries, or both. Particular projects may require the use of specific construction techniques or products. 18105 12/23

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