

Lower carbon concrete products

For all types of structures



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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High-rise





Infrastructure

ENVIROCRETE®

products

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

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.

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 resistant to chloride ingress making them suitable for marine environments.









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

Dadwatian in

| portland cement ^{3,4,5} | 30% - 70% | 45% - 70% | | | | 50% - 70% | | | | | |
|---|-------------------|-----------|---|--|--|-----------|---|--|--|--|--|
| Reduction in embodied carbon ⁶ | | 0 | 0 | | | | 0 | | | | |
| Engineering and du | rability properti | ies | | | | | | | | | |
| 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 The portland cement reductions in the table do not apply to Tasmania. Please contact the Boral Tasmanian office. 5 For specific values contact the local Boral office. 6 The dots indicate the relative reduction in embodied carbon. The hollow dots represent the potential relative reduction in embodied carbon. Contact the local Boral office for specific embodied carbon values. Alternatively, they can be found in Boral's Environmental Product Declarations which can be downloaded from boral.com.au/EPDs

boral.com.au



Building somethina great

Boral Sustainability Team product support **CONCRETE T** 1300 267 251 **HEAD OFFICE T** (02) 9220 6300

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