

# ENVIROCRETE® PLUS CONCRETE

## Typical applications:

- Civil works
- Commercial
- Infrastructure
- Industrial slabs
- Marine environment
- Post tensioned slabs

Boral Concrete is committed to a lower carbon future. Boral has three LCC product ranges, Envirocrete®, Envirocrete® Plus and ENVISIA® which can cover many concrete applications from residential foot paths to high rise commercial towers.

Most of the embodied carbon in concrete is from the portland cement. To reduce the embodied carbon, some of the portland cement is replaced with supplementary cementitious materials (SCM) such as fly ash and granulated slag. All three LCC products have lower portland cement contents and higher SCM contents but Envirocrete® Plus and ENVISIA® have been designed to also have some superior engineering properties.

Envirocrete®, Envirocrete® Plus and ENVISIA® contain reclaimed water and manufactured sand which when combined with their lower portland cement content may help projects in achieving a Green Star\* or ISCA rating\*\*.

This data sheet relates to Envirocrete® Plus but data sheets on Envirocrete® and ENVISIA® are also available.

Envirocrete® Plus is a sustainable concrete compliant with AS 1379 (Specification and supply of concrete) with following benefits.

### Lower Carbon

- Envirocrete® Plus has a lower portland cement content and is suitable for projects seeking to maximise the number of green star points from concrete.
- Envirocrete® Plus has a lower carbon content and is suitable for projects seeking registration with the Green Building Council of Australia or the Infrastructure Sustainability Council of Australia (ISCA).

### Superior Engineering properties

- Envirocrete® Plus achieves good early-age strength and is suitable for most post tensioned applications.
- Envirocrete® Plus achieves up to 25 percent less shrinkage compared to conventional sustainable concrete mixes. The lower shrinkage of Envirocrete® Plus will allow for more engineering options such as the design of larger slabs with fewer joints.



### Superior Durability

- Envirocrete® Plus provides improved durability, through greater protection to steel reinforcement against chloride induced corrosion.
- Envirocrete® Plus has improved sulphate and acid resistance properties.
- Envirocrete® Plus mitigates the potential expansion due to alkali aggregate reactivity.

### Properties

- AS 1379 compliance – Fully compliant
- Minimum portland cement reduction (cf GBCA base case) - 45%
- Early age strength – Suitable for post tensioned applications (22 at 4&5 days, 25MPa at 5 days)
- Drying shrinkage @ 56 days – nominal 550 microstrain (40MPa/20mm)

\*Green Building Council of Australia

\*\*Infrastructure Sustainability Council of Australia

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