

LC

CONCRETE

Concrite is committed to a lower carbon future. Concrite aims to achieve this by reducing the embodied carbon in the production process of the concrete and raw materials and by offering Lower Carbon Concrete (LCC) products to our clients. Concrite has three LCC product ranges, LC, LCP and LCHP which will cover all 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 low portland cement contents and high SCM contents but LCP and LCHP have been designed to also have superior engineering properties.

LC, LCP and LCHP contain reclaimed water and manufactured sand which when combined with their low portland cement content will help projects achieve a Green Star* or ISCA rating**.

This data sheet relates to LC but data sheets on LCP and LCHP are also available.

LC is a sustainable concrete compliant with AS 1379 (Specification and supply of concrete) and is suitable for projects targeting a GBCA or ISCA rating).

LC 30% and 40% options

LC is available as LC30 and LC40. LC30 has a portland cement reduction of greater than 30% and can be used where a project requires 2 points under the GBCA rating scheme. LC40 has a minimum portland cement reduction of 40% and can be used where a project requires 3 points from the concrete.

The reduction in portland cement reduces the early age strength and the inclusion of high levels of SCMs may increase the drying shrinkage. So, although LC is compliant with AS 1379 it may not be suitable where high early age strength or low drying shrinkage is required. Where these properties are required LCP or LCHP should be considered.

Properties

Typical applications:

- House slabs and driveways
- Commercial*
- Civil works*
- Infrastructure*

*Limited to applications where good early strength and low shrinkage are not required



- AS 1379 compliance – Fully compliant
- Minimum portland cement reduction (cf GBCA reference case) - LC30 - 30%, LC40 - 40%
- Early age strength – Complies with AS 1379
- Drying shrinkage – Complies with AS 1379

*Green Building Council of Australia

**Infrastructure Council of Australia