

FAQs

when using GreenCem Technologies

Can I increase the supplementary cementitious material (SCM) component of concrete?

✓ **YES.** GreenCem admixtures facilitates higher ratios of fly ash and/or slag in concrete mixes. Ternary mix designs of up to 80% SCM have been shown to perform similarly to normal mixes containing 50% replacement.

Is GreenCem compatible with all cementitious materials?

✓ **YES.** GreenCem is compatible with all cement and SCMs.

Is there higher early reactivity in high SCM mixes?

✓ **YES.** GreenCem admixtures compensate for the usual lower reactivity at early ages when using elevated SCM levels. Comparable early strengths to straight concrete mixes are achievable.

Can I achieve significantly lower drying shrinkage in concrete?

✓ **YES.** GreenCem admixtures promote expansion across all ages to reduce overall shrinkage.

Is support available for designing low embodied carbon and low shrinkage mix designs?

✓ **YES.** Cement Australia offers support to all customers using GreenCem admixtures whether it be laboratory based or in field applications.

Is there a reduction in other admixtures?

✓ **YES.** The inherent properties of GreenCem admixtures allow the elimination of water reducers and superplasticisers. In some concrete mixes, all conventional admixtures may be removed completely.

Can GreenCem be used in concrete in cold climates?

✓ **YES.** GreenCem admixtures promote early reactivity which assists concrete performance in cooler conditions.

Can I use GreenCem for Post Tensioned concrete?

✓ **YES.** GreenCem admixtures are advantageous in precast, prestressed and post-tensioned applications where early stripping allows work to progress faster.

Is GreenCem different from Geopolymer?

✓ **YES.** GreenCem is essentially an “admixture” and is used in concrete mix designs for a number of benefits in comparison to “geopolymer” concrete based mix is only slag and fly ash – contains no GP cement.

Can I achieve lower strengths using GreenCem or will it be >50MPa like Geopolymers?

✓ **YES.** GreenCem concrete may be made in any strength grade or mix designs.

Is GreenCem safe to handle without additional PPE?

✓ **YES.** GreenCem is a powdered admixture at neutral pH and is not toxic. No further PPE required to your conventional PPE requirements, unlike Geopolymer activators.

Is GreenCem Admixture compliant to AS 1478 - Australian Standard: Chemical Admixtures For Concrete, Mortar & Grout?

✓ **YES.** Concrete producers can confidently use GreenCem admixtures in all concrete mixes as per AS 1478 and AS 3600 and as well as for infrastructure requirements.

Is this a pathway to Environmental Product Declarations (EPD)?

✓ **YES.** GreenCem admixtures assist concrete producers in attaining EPD's via higher SCM use.

GreenCem is compliant to AS1379 and AS3600 unlike Geopolymer mixes

How do I dose GreenCem?

GreenCem admixtures are powdered admixtures that may be added directly to the agitator or dosed into the standard batching systems.