

Technologies to reduce embodied carbon in concrete without compromising performance

GreenCem® technologies allow the mix designer to maximise – up to 80% – the replacement of cement with slag and/or fly ash without significantly compromising concrete performance and in so doing, achieve significant reductions in embodied carbon in concrete.

The average embodied carbon in GP cement is over 5 times that of slag and nearly 30 times that of fly ash. However, the downside of replacing a significant proportion of GP cement with fly ash and/or slag is reduced concrete performance.

GreenCem[®] is the solution...

it allows increased fly ash and slag in your concrete mix without compromising on concrete performance.



The chart to the left shows a comparison of embodied carbon in various concrete mixes.

Contributing towards the cement and concrete industry ambition for **net zero carbon concrete by 2050**



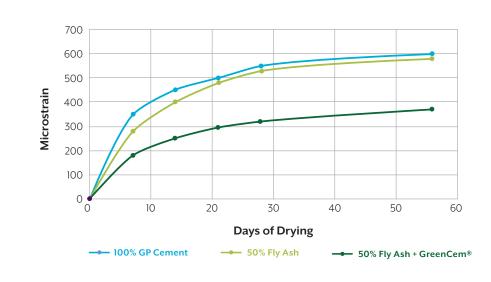
Patent Pending

Strength Development





Drying Shrinkage



Concrete drying shrinkage at high levels of GP replacement with fly ash and/or slag is significantly reduced when using GreenCem® technologies.

Note: Data provided in the above graphs was achieved by testing conducted in accordance with the relevant Australian Standards test methods, at a NATA registered laboratory. Graphs should be used only as a guide to potential strength as various factors can impact final strength results.



