Landmark Ltd & Berkeley Homes  
Royal Arsenal Riverside, London

The Challenge  
This new Berkeley Homes development is situated near the banks of the River Thames in the Royal Borough of Greenwich, offering fantastic riverside living. Berkeley Homes has a strong sustainability agenda, continuously seeking to make use of new sustainable products on site. For this project Cemfree was chosen to make up the capping beams that form the Thames flood defensive system which sits on the south side of the river, next to the Woolwich ferry.

The Cemfree Solution  
Landmark Ltd was the groundworker at Royal Arsenal Riverside and heard about Cemfree via social media. After learning of the huge potential carbon savings, Landmark decided to use 200m$^3$ of Cemfree concrete for a capping beam application & foundation for a retaining wall. The original mix was a C32/40 CEMI 20mm limestone S4 slump, by opting to use Cemfree instead, a CO$_2$ saving of 83% was achieved.

A CO$_2$ Saving of 83% on this project

The Practicalities  
Cemfree concrete was placed using both skip and pump throughout this phase of the project with no issues. The Cemfree concrete was placed during February & early March meaning a slightly delayed initial set, but the use of frost blankets and additional formwork meant no delay to programme. The placing & finishing of Cemfree was likened to conventional concrete by the Landmark team, who were pleased with the result they achieved.
The Result
Berkeley Homes and Landmark Ltd achieved an impressive CO₂ saving of 83% by using Cemfree, which in turn amounted to a massive 60 tonnes of carbon.

Berkeley Homes is now actively looking at further opportunities to use Cemfree concrete in its projects, understanding that the need to build a sustainable future is paramount.