

Canal Bridge, Manchester

Product

evoBuild low carbon concrete

Volume

263.2 cubic metres

Main contractor

Multi Fix Construction Ltd

Client

Manchester City Council

Project overview

Heidelberg Materials UK has supplied its evoBuild low carbon concrete containing 85 per cent GGBS to help construct Ashton Canal Bridge in Manchester. In addition to its strength and sustainability credentials, the high GGBS replacement resulted in a very light coloured concrete to help realise the vision of architects Hawkins Brown.

Project description

Heidelberg Materials UK has supplied its evoBuild low carbon concrete to construct a new bridge over the Ashton canal in the Ancoats district of Manchester.

The pedestrian and cycle bridge replaces an old lock bridge which posed access challenges, particularly for those with mobility issues or pushchairs. It has been designed by architects Hawkins Browns to preserve the canal-side setting and links New Islington Green with the marina, providing an important link to public transport.

The concrete supplied from Heidelberg Materials' nearby Salford plant contained 85 per cent evoBuild low carbon GGBS (ground granulated blastfurnace slag), a proven cement replacement product which can be used to reduce the CO₂ associated with concrete while also improving its long-term durability.

The use of evoBuild low carbon GGBS also provided concrete with a lighter, more visually appealing, colour in line with the vision of the architect.

"The customer required the challenging combination of a high strength concrete containing an extremely high percentage of GGBS for improved environmental performance," said Hannah Roberts, Area Technical Manager at Heidelberg Materials UK.

"As a result, our technical team designed a bespoke mix using modern admixture technology to meet these requirements while also producing a very light coloured concrete without the need to use white cement, which is costly."

The evoBuild low carbon concrete supplied delivered a carbon reduction of 50.7 tonnes compared with a standard Portland cement.

