

## Innovation Case Study – Brico Blocks at Ings Beck, Wakefield

Pre-cast concrete blocks for use in retaining walls and temporary works.

### What are they?

Brico Blocks are precast concrete blocks incorporating a peg design for simple interlock between components. It makes building retaining walls, bridge abutments etc (including temporary structures) easier and more time efficient.

Vertical dowel holes align to allow high tensile steel re-bars to pass down the entire wall to be grouted into place. They can also be tied back. A built in anchor system allows for safe handling and easy installation.

Taper units and coping units are available. It is available in a number of formats and with varying finishes. The units are available for either purchase or there is a rental option.



Pictures: Walls built at Ings Beck, Wakefield



### Case Study - Ings Beck, Wakefield

Due to recent flooding to the Wakefield area of Yorkshire, the Environment Agency has implemented a strategic programme of works to install new defences to reduce the risk of flooding to the City. Many areas of work included working within the existing channels to replace old or damaged structures.

Brico-Blocks were used in many areas of the project as retaining walls and also as part of our temporary works. The team found that a wall around 30m long by 2m high could be constructed in 1 day. This provides an excellent, cost effective solution to construction in or near water and the beyond zero approach to reducing Health, Safety & Environment risks on projects.

Many thanks to the team at Morrison for sharing this information through their best practice note (Steve Hamer, Ian Gemmell, Lee Bulman, Matthew Marsh).



Pictures: Walls built at Ings Beck, Wakefield



### Where can I get further information?

- Manufactured in the UK by Camel in West Yorkshire. More information can be found on the manufacturers' website <http://www.camelprecast.co.uk/pages/retaining-walls/brico>

**This note is for general awareness of product availability and does not constitute an official endorsement by the Environment Agency.**

Andy Powell, Innovation Manager - ncpms. June 2012.

*One of the Brico block walls at Wakefield demonstrated a saving of 11% on direct cost. An additional financial benefit was also derived through the reduced prelim cost as a result of the more efficient construction method.*

Rick Bonewell - GallifordTry

4 CROSS SECTION THROUGH WALL

