

“CEVO allows us to work with customers to provide sustainable alternatives to traditional concretes and transparent carbon information in order to measure positive impact – it is fantastic to contribute to the drive for sustainable innovation and collaboration.”

Millie Field, External Account Manager at Tarmac

Solutions

Sustainable Construction

CEVO

Tarmac’s CEVO brand represents our commitment to supplying materials that offer transparent carbon savings and easy to understand performance grading, aligned with leading industry standard ratings. Grading is based on the amount of carbon taken out of the design using alternative binders, cement replacements, limestone fillers, or an alkali activated solution.

We align our current range of CEVO low carbon concretes and screeds to ratings published by the Institution of Civil Engineers (ICE), endorsed by the Green Construction Board in the Low Carbon Concrete Route map. It uses intuitive A, B, C to G gradings similar to efficiency bars that we see on everyday electrical items in our daily lives. This enables architects, structural engineers, contractors, and their clients to clearly measure and compare carbon emissions associated with different materials, helping with decision making.

Examples of CEVO projects completed throughout 2024 include the development of Liverpool One and work completed for the Chelsea Flower Show.

Liverpool One is a major mixed retail, leisure and office development on the site of the old Liverpool Docks. Delivering long term sustainability and minimising net carbon emissions were key aims of this project from the start, together with producing a durable, low maintenance infrastructure hub that would deliver 365, 24-7 service to Liverpool’s public transport users.

After working with the contractors to understand the specifications, strength requirements, and programmed timescales for the project, Tarmac’s team were able to recommend optimised mix designs with major reductions in embodied carbon. This was supported with detailed cradle to gate carbon footprint calculations and sample testing to ensure that the data was in place to support these recommendations.



As planned, Topforce CEVO fibre reinforced concrete was supplied to the site and expertly placed by the team at Huyton Asphalt Civils. Using a Topforce CEVO fibre reinforced low carbon mix delivered a significant reduction in carbon savings, almost halving the carbon footprint per cubic metre of the concrete supplied and saving over 49,500 kgCO₂e for the entire scheme. When combined with low carbon asphalt, this contributed to an overall net carbon saving for the scheme of 40 per cent versus traditional construction methods.

Our customer JUNKO was exhibiting at the Chelsea Flower Show in May 2024. The Royal Horticultural Society (RHS) commissioned Nicholsons to complete a Green Garden Audit to ensure a reduced carbon footprint and minimised environmental impact of the ‘Show’ and ‘Sanctuary’ categories at the Chelsea Flower Show. The challenge was to reduce carbon emissions through alternative construction methods and materials, of which cement is a significant contributor.

After working with the client to understand the requirement, Tarmac’s London and South East readymix team were able to recommend optimised mix designs that met the performance requirements but also delivered major reductions in embodied carbon. The CEVO AACM ultra-low carbon concrete mix that was proposed used alkali activated geopolymers technology and contained no cement. It achieved the 30 Newton strength required, while delivering a 66 per cent reduction in carbon emissions compared to standard concrete using ordinary portland cement.