Green, greener, greenest

The cement can be used in aggressive conditions and its technical benefits include high resistance to chloride ingress.

AfriSam has introduced its new Eco Building Cement with half the world's average carbon footprint for cement. *Civil Engineering Contractor* was invited to the launch of the product last month.

Eco Building Cement is a blend of high-performance cement and mineral components; making it extremely durable. It claims to be suitable for road-construction projects. The concrete it produces is less permeable: offering greater resistance to penetration of harmful substances. It can be used in aggressive conditions and its technical benefits include high resistance to chloride ingress (reducing the risk of reinforcement corrosion) as well as high resistance to attacks by sulphates and other chemicals (preventing early failure of concrete). It eliminates the risk of alkali-silica reaction and is also ideal for soil-stabilisation applications. When prepared with sand, stone and water, the carbon footprint of the mix is reduced to between 79 g/kg and 180 g/kg. "The overall carbon footprint of this cement stands at 453 g/kg – almost half that of the world average of 890 g/kg according to Cembureau and the World Business Council for Sustainable Development," says Mike McDonald, AfriSam's product technical manager. "We have achieved this without compromising on the quality required by SABS for cement in this strength class."

Tests indicate two-, seven- and 28-day strengths of ≥10 MPa, ≥20 MPa and ≥40 MPa respectively with excellent long-term strength due to the reactive mineral components in the product. Eco Building Cement compares favourably with products in the 32,5 MPa strength class and outperforms many competitive products in this class in terms of workability, as well as durability and long-term strength. This CEM III A 32.5N blast-furnace cement complies fully with SANS 50197 specifications. It is available in practical and convenient 20 kg bags for ease of handling, reduced wastage and in-store convenience as well as the traditional 50 kg bags for the building industry.