

**TOPFORCE**

# Proven performance

**ALDI DISTRIBUTION CENTRE, CARDIFF**

## The challenge

As part of its UK expansion program Aldi was building a new £59 million regional distribution centre and offices at Wentloog near Cardiff. Unforeseen ground conditions and hydrological constraints pushed the development costs high enough to force Aldi to look at other sites outside Wales until a grant of £4.5 million was offered by the Welsh government to assist the project. When completed the building would include a 3,000m<sup>2</sup> office complex, 250 car parking spaces, 100 loading bays, gate house and access roads. The designs specified an enhanced concrete mix with a FibrinXT fibre. Moortown previously had a bad experience of using these fibres through a competitor supplier on another distribution centre. Aldi's design team were keen to see Tarmac's offering and understand the process of adding the fibres. Over 10,000m<sup>3</sup> was required for external floor slabs.

## Our solution

TOPFORCE concrete is a product Tarmac regularly produces and, as such, the fibre addition Aldi wanted was well known. A system of addition that combined the fibre manufacturer's recommendation and Tarmac's experience was offered and following a plant visit and trial, was accepted by the client. During the contract the client's designers carried out spot visits to make sure addition was being carried out correctly.

## Results and benefits

10,400m<sup>3</sup> of TOPFORCE concrete with FibrinXT fibre was successfully supplied over a period of 13 months and the finished product was exactly as expected. The TOPFORCE concrete reduced the effects of plastic shrinkage and plastic settlement cracking, whilst enhancing the surface properties and durability of the hardened, cementitious product. This mix was used as an alternative to air entrained concrete (AEA). The contractor, Moortown, commented that they were impressed with the consistency of supply and quality of the product and would recommend Tarmac as a preferred supplier in future.