



SIKA AT WORK

MAMHEAD SLIPWAY EXMOUTH

CONCRETE: SikaFiber® Force 400

BUILDING TRUST



MAMHEAD SLIPWAY EXMOUTH



SIKA ALTERNATIVE TO STEEL REINFORCEMENT BOLSTERS CONCRETE DEFENCE AGAINST CORROSION.

Sika provided a long-term, environmentally-friendly solution to the complex and potentially dangerous restoration of a coastal slipway.

The £1.2 million Mamhead Slipway in Exmouth, a 'major technical undertaking' on behalf of East Devon District Council (EDDC), reintroduced maritime access to the River Exe in the hope of increasing visitor numbers to the town. The original structure was closed in 2012 and eventually demolished by contractors Raymond Brown Construction as part of the rebuilding process.

Following Environment Agency guidance, which stipulates minimal use of traditional steel fabric where practicable in marine and coastal concrete, EDDC, in conjunction with the contractors and structural engineers, turned to SikaFiber® Force 400 to help extend the service life of the slipway and provide a safer, cost-effective and high-performance alternative to traditional steel reinforcement.

SikaFiber® Force 400 comprises a range of macro synthetic fibres which can be extruded, embossed and cut for use in a range of concrete applications. The system enhances the toughness of concrete, alleviating the need for steel mesh when used with the appropriate design. Simple to apply, as well as being easier and safer to handle than steel, SikaFiber® Force 400 offers three-dimensional reinforcement solution which does not rust or corrode due to long-term exposure to seawater chloride.

Due to water level and tidal fluctuations, Mamhead Slipway works took place behind a cofferdam provided by interlocking sheet piles. This resulted in a highly-restricted working area with mobile plant operating alongside site operatives.

However, significant health and safety hazards were eliminated for the workforce due to the availability of SikaFiber® Force 400. Had welded steel mesh reinforcement been specified, a crane would have been required to lift it into position, leading to potential disruption for drivers and pedestrians as well as causing a danger for on-site construction teams.

SikaFiber® Force 400 offered a far more practical alternative. It was poured directly into the slipway's formwork, thus ensuring the reinforcement's containment within the delivered concrete and resulting in a more efficient installation and reduced construction time.

The slipway's six-month construction programme was completed in September 2016. The 38 metre-long, 12-metre-wide feature was described by Exmouth Regeneration Board, chairman, Cllr Philip Skinner as a 'larger, safer and more resilient facility for people to use for decades to come'.

SikaFiber® Force 400 will not be able to hold the tides at bay, but it will nullify the water's corrosive element and ensure Exmouth's latest maritime facility doesn't slip away to sea over time.

For further information call 0800 292 2572.



FM 12504



EMS 45308



OHS 585274

SIKA LIMITED

Head Office
Watchmead
Welwyn Garden City
Hertfordshire, AL7 1BQ
United Kingdom

Contact

Phone +44 1 707 394444
Fax +44 1 707 329129
Email enquiries@uk.sika.com
www.sika.co.uk
@SikaLimited

BUILDING TRUST

