



SIKA AT WORK

BELLANDUR LAKE, INDIA

CONCRETE PROTECTION: Sikagard®-7000 CR

FLOOD CONTROL WORKS



PROJECT DESCRIPTION

Project name: Bellandur Lake project - flood control works
 Location: Bengaluru, India
 Size: 9000m²

Bengaluru, known as the Garden city of India, is surrounded by around 189 lakes which are managed under Bengaluru Development Authority (BDA) and Bruhath Bengaluru Mahanagar Palike (BBMP). With the rapid urbanization and cyber parks, Bengaluru is also recognized as the Silicon Valley of India. Numerous commercial, industrial, and residential establishments have been constructed around Bellandur Lake, the largest lake in the city. The presence of sewage and chemicals in the water causes froth generation due to the hydraulic jump at the overflow near the weir. This flows into the mother valley, and the froth generated could potentially catch fire, which is a safety concern for residents.

PROJECT REQUIREMENTS

An independent project management consultant, E I technologies on behalf of BDA came up with the idea to create a diversion canal adjacent to the weir to avoid hydraulic jump, thereby preventing the toxic froth generation. One of the major challenges was to ensure the durability of the structure against aggressive chemical attacks. Consultants reached out to Sika Solutions to provide a holistic solution to match the longevity of the structure and ensure fast completion of work.

Any product name or reference reflects the Sika product name at the time of creation of this document and may differ from the product name or reference during past events.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



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SIKA SOLUTIONS

Sika proposed an innovative solution, Sikagard®-7000 CR which is powered by Xolutec® - our unique technology developed for improved durability, to solve the problems of demanding environments. Sikagard®-7000 CR can be applied to highly humid substrates as compared to traditional waterproofing systems for wastewater facilities. Offering high resistance to abrasion and aggressive chemicals, Sikagard®-7000 CR instilled confidence with consultants after lab trials were carried out on an accelerated test of sulphuric attack on concrete and an industrial effluent test by our R&D team. Sikagard®-7000 CR was chosen as the solution for waterproofing and protecting wastewater concrete structures for this project.

CUSTOMERS BENEFIT

The timely delivery of the project came as big relief to BDA, thanks to Xolutec technology. The Sikagard®-7000 CR ensured the protection of concrete against the aggressive chemicals present in sewage water. Bellandur lake regained its charm as a step to retaining the water bodies of the city.

PROJECT FACTS AT A GLANCE

The diversion tunnel at Bellandur lake was 145m long, 6.4m in height and 3.6m in width. The total application area of Sikagard®-7000 CR was 9,000m². The works were completed in 15 months, including the civil works for three packages (Bellandur, Varthur and Yamallur). This success story at Bellandur project supported additional works at the Varthur project and was India's first wastewater project for the Government using Sikagard®-7000 CR.

PROJECT PARTICIPANTS

Project Owner:	Bengaluru Development Authority
Applicator/Contractor:	Sri Vinayaka
Designer/Architect/Specifier:	E I Technologies

