

**Project:** Bellandur Lake project  
- flood control works at  
Bellandur Lake

**Location:** Bengaluru, India

**Project completed:** 2019

**Owner/s:** Bengaluru  
Development Authority

**Applicator/Contractor:** Sri  
Vinayaka

**Designer/Architect/Specifier:**  
E I Technologies

**Market sector:** Water  
Management

**Products used & amounts:**  
MasterSeal 7000 CR : 9,000 m<sup>2</sup>

## Bellandur Lake Project

### Flood control works at Bellandur Lake



Our reference in Bengaluru (India): Bellandur Lake Project

#### The background

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.

#### The challenge

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 Master Builders Solutions to provide a holistic solution to match the longevity of the structure and ensure fast completion of work.

#### Contact:

Master Builders Solutions India Private Limited  
[construction-india@mbcc-group.com](mailto:construction-india@mbcc-group.com)

# Bellandur Lake Project

## Flood control works at Bellandur Lake



Our reference in Bengaluru (India): Bellandur Lake Project

### Our solution

Master Builders Solutions proposed an innovative solution, MasterSeal 7000 CR which is powered by Xolutec® - our unique technology developed for improved durability, to solve the problems of demanding environments. MasterSeal 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, MasterSeal 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. MasterSeal 7000 CR was chosen as the solution for waterproofing and protecting wastewater concrete structures for this project.

### The customer's benefit

- Timely delivery of the project came as big relief to BDA, thanks to Xolutec technology.
- MasterSeal 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.

### Projects facts at a glance

- Diversion tunnel at Bellandur lake was 145m long, 6.4m in height and 3.6m in width.
- The total application area of MasterSeal 7000 CR was 9,000m<sup>2</sup>.
- Works were completed in 15 months, including the civil works for three packages (Bellandur, Varthur and Yamallur)
- Success story at Bellandur project supported additional works at the Varthur project.
- India's first wastewater project for the Government using MasterSeal 7000 CR.

### Master Builders Solutions by MBCC Group

The Master Builders Solutions brand expresses MBCC Group's expertise in providing customized chemical solutions for new construction, maintenance, repair and restoration of structures.

Master Builders Solutions is built on the experience gained from more than a century in the construction industry. At the core of the Master Builders Solutions brand is the combined know-how and experience of a global community of construction experts, who connect with you to solve all of your construction challenges.

Further information is available at:

<https://www.master-builders-solutions.com/en-in>