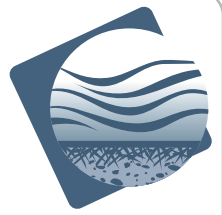




*At the Lab. In the Field.
By Your Side.*

ESSEL TOWERS HOUSING PROJECT

Gurgaon, India



**CONCRETE
WATERPROOFING**

Page 1 of 2

QUESTIONS: 604-324-8280 or www.kryton.com

BACKGROUND

Located in the heart of Gurgaon, India, just twelve kilometres from New Delhi's Indira Gandhi International Airport, the Essel Towers is a housing colony of nine towers boasting over 1100 modern apartments. Surrounded by lush landscaped gardens, a swimming pool and modern amenities, the Towers are one of Gurgaon's most well-appointed places to live. The Essel Group project team required a proven concrete waterproofing solution for Phase 1 – the landscaped gardens surrounding the Essel Towers. They wanted to test the effectiveness of the waterproofing system in Phase 1 before employing the same system for Phase 2, which was more challenging because it included below-grade water tanks, above-grade water tanks, toilets and the swimming pool. Since the luxurious apartments were being marketed with a high price-point, it was critical that the project team could work with a trusted company in providing the very best, most effective waterproofing solution available.

SOLUTION

The team selected Kryton International's Krystol® Concrete Waterproofing System for Phase 1. Based on the overwhelming success of the system's outstanding performance, Kryton was also awarded the contract for Phase 2. When it comes to preventing water damage and preserving the integrity of concrete structures, waterproofing is essential. In the case of concrete below- and above-grade water tanks, however, reliable



The Essel Towers is a housing colony of nine towers boasting over 1100 modern apartments today

waterproofing is doubly critical. A leak in a water tank can be expensive and time-consuming to repair, especially in underground or partially buried tanks since below-grade cracks and leaks are often more difficult to detect and repair.

The Krystol® surface applied system (which includes the Krystol T1™ and Krystol T2™ cementitious slurry treatments) was applied to the entire surface area inside of the below- and above-grade water tanks, the toilets, swimming pool and landscaped areas to create watertight structures protected from sulphates and other elements that could compromise the integrity of the structure.

Based on Kryton's proprietary crystalline waterproofing technology, the Krystol® System employs advanced integral crystalline waterproofing technology to transform porous concrete into a permanent, water-resistant barrier and provides a

PROJECT CASE STUDY

The Kryton Group of Companies.

1645 East Kent Avenue, Vancouver, BC Canada V5P 2S8 Tel: 1-604-324-8280 Toll Free: 1-800-267-8280 Fax: 1-604-324-8899 E-mail: info@kryton.com Web: www.kryton.com

ESSEL TOWERS HOUSING PROJECT

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guaranteed defense against water damage and steel reinforcement corrosion through constant head pressure. When combined with water and concrete, Krystol® causes millions of needle-like crystals to grow and spread concrete particles and permanently block the movement of water and waterborne contaminants and resisting hydrostatic pressure. If cracks later form, incoming water cause additional crystals to grow, filling the cracks and ensuring that the structure's waterproofing barrier is protected.

Key factors in the project team's decision to use the Krystol® Concrete Waterproofing System were its ease of application and cost savings (Krystol eliminates the need for expensive, often unreliable external waterproofing membranes). Also, the soil in hot or tropical climates found in India, particularly below-grade, contain high levels of sulphates, chlorides and other chemicals that decrease concrete's integrity and corrode steel reinforcements. Unlike membrane-based

systems the Krystol® Concrete Waterproofing system becomes a permanent part of the concrete matrix it will not wear away and is impervious to surface damage making it extremely effective in such an environment. By blocking the penetration of water that can carry these contaminants and safeguarding concrete and reinforcements against corrosion, the Krystol® Concrete Waterproofing System will prolong a structure's life.

The result? Over 9000 square metres (29,527.6 square feet) of the Essel Towers were treated with Kryton's surface-applied product to help eliminate the need for external waterproofing membranes, which saved considerable construction time and costs for the Essel Group project team.

LOCATION

Main Mehrauli Gurgaon Road
Gurgaon, India

OWNER

Essel Group

APPLICATOR

Kryton Buildmat Co. Pvt. Ltd.

ENGINEERS

Essel Group

CONTRACTOR

Best Tech Engineers, Modern Construction



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