PROJECT SHEET

CIBIS Nine

2017

ABOUT THIS PROJECT:

Market Segment:
General Construction

Owner/Client:
PT Bhumyamca Sekawan

Products Used:
Xypex Concentrate
Xypex Patch'n Plug

Location:
South Jakarta, Indonesia

Contractors:
PT Waskita Karya, Tbk
PT Tata Rekatama Bunindo

Green Building Consultant:
ARUP

Architect Consultant:
Broadway Malyan & Arkonin

Principal Architect:
Ian Simpson, Radhie Alfha & Tanushree Saha

Civil & Structure:
TTW Indonesia

In the heart of South Jakarta, Indonesia, CIBIS Nine is a prestigious part of the CIBIS Park complex, which features seven office towers, two apartment blocks, a childcare center, underground parking, a sports field, and retail, food and beverage facilities.

Standing at 125 meters with a three-level below-grade parking structure, CIBIS Nine encountered significant waterproofing challenges post-construction.

The below-grade structure is located within the water table and the intense rainstorms typical of the Cilandak area resulted in routine flooding in basement, rendering it unusable.

Previous attempts to remedy water ingress with polyurethane injections proved ineffective, prompting the project team to explore Xypex Crystalline Technology. This innovative solution using Xypex Concentrate and Xypex Patch 'n Plug was successful in stoping the leakage issues, even with the high hydrostatic pressure.

Xypex Patch'n Plug, a rapid-setting hydraulic cement compound, was applied to seal leaks in joints and cracks on the concrete of basement levels 2 and 3, halting the water ingress through localized defects.

Xypex Concentrate was used on the negative side of the concrete slab in basement level 3. This product is known for its versatility in application as it is capable of being applied to wet surfaces on either the positive or the negative side. As Xypex Concentrate is a chemical treatment for concrete, it does not act as a barrier system.

This means that the coating can remain on the surface of the concrete, or it may be removed after an allowable curing period. Xypex Concentrate results in the concrete being waterproof and chemically resistant. Moreover, it possesses self-healing properties for cracks up to 0.5 mm to seal future microcracks.

This project imposed strict repair criteria, requiring the floor slab to be perfectly level without any color discrepancy between the repaired sections and the original concrete.

For the above reasons, the Xypex Concentrate coating was removed after a curing period of 28 days, as the concrete substrate was sufficiently treated with the Xypex active ingredients. The removal of the applied coating resulted in a flawless match with the original pavement's color and texture, satisfying the project's rigorous aesthetic and structural requirements, while remaining watertight.

The successful application of Xypex products has ensured that no leaks have been reported post-repair, allowing the basement to be fully operational. This outcome demonstrates the effectiveness of Xypex Crystalline Technology in overcoming substantial waterproofing challenges, securing the durability and functionality of the CIBIS Nine building amidst Jakarta's bustling urban landscape.

To learn more about how Xypex protects and waterproofs below-grade foundations, **click here**.