PROJECT CASESTUDY

BACKGROUND

Gera 77 is a commercial building in Pune, (Maharashtra,) India, that required waterproofing in its basement parking facility. There was a large quantity of water seeping through the retaining walls while some points had active leaking. Water was accumulating in the basement and required continuous pumping.

The main cause was active leakage sources in the ramp areas and even some areas on the floor level. The developer had provided drains for the main area of leakage and was pumping out water every 15 minutes. The floor area also had active sources under the PCC cover. All the walls were covered with thick plaster. If the water was not pumped out, it would accumulate up to 1.5ft on the basement floor within 45 minutes.

Artist rendering of completed commercial building

Gera 77 building

SOLUTION

Kryton Buildmat and its regional applicator offered the following advice:

- Demolish the plaster and treat the walls with Krystol T1 and T2 slurry coating system

- Isolate the active sources and plug and treat those areas

- Remove the floor covering and treat it with Krystol T1 and T2

- Treat all cracks with Krystol Plug, Krystol T1 and Krystol Baricote dry-packs

The six-inch thick plaster surface was removed from the basement's retaining walls. Removing the plaster revealed a polymer coating underneath. Kryton's applicator removed the existing polymer coating by hacking the plaster

Five hp2 pumps working continuously

with grinding machines. This resulted in a rough finished appearance.

The applicator then prepared the surface for coatings of Krystol T1 and T2 by soaking all the walls for four days (SSD situation). At this point, the developer noticed water had started opening new areas of active leakage and seeping in through new places.

One coat of Krystol T1 at 0.8 kg/m2 was applied on the walls followed by second coat of Krystol T2 at 0.8 kg/m2. The walls were regularly cured by sprinkling water. Curing continued for three days.

After three days, only the active points were flowing. The minimal seepage had diminished or completely stopped. The team continued curing for the next seven days and achieved a total end to water seepage.

The next step was to waterproof the floor by removing the PCC layer and waterproofing the concrete. The coves along the columns were treated with Krystol Baricote and the entire floor was treated with Krystol T1 at 0.8 kg/m2 then a second coat with Krystol T2 at 0.8kg/m2. After treating the entire basement, all the active sources were treated with the Krystol Crack Repair system.

After approximately 20 days, our applicator achieved the desired results. The crystal growth within the concrete had completely stopped the water and finished drying the surfaces. As a precaution, we also watched for water leakages during the monsoon rains and confirmed the entire basement remained dry.

LOCATION
Pune, Maharashtra, India

OWNER
Gera Developments Pvt. Ltd.

APPLICATOR
Aidasani's Waterproofing and Structural Repair Company, Mumbai

ENGINEERS
In-house engineer and architect of Gera Developments Pvt. Ltd.

DISTRIBUTOR
Aidasani's Waterproofing and Structural Repair Company, Mumbai