

Abdali Views Tower

Amman, Jordan (2021)

PRODUCTS USED:

Kryston Internal Membrane™ (KIM®) **Kryston Waterstop Treatment™**
Krytonite™ Swelling Waterstop

OWNER/DEVELOPER:

SinoGulf Real Estate Investments L.L.C.

ARCHITECT/ENGINEER:

Consolidated Consultants Group

GENERAL CONTRACTOR:

Arab Towers Contracting Co.

READY-MIX SUPPLIER:

Manaseer Ready Mix Concrete

DISTRIBUTOR/APPLICATOR:

Concrete Technology Co.

BACKGROUND

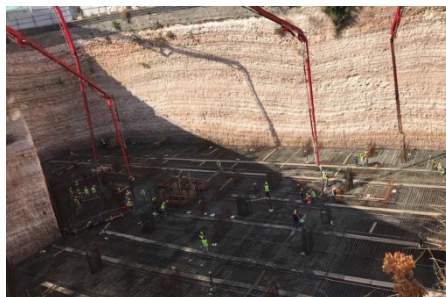
The Al Abdali district is one full of a number of iconic landmarks. From the stately-looking Arab Bank headquarters to the majestic King Hussein Mosque, there are many construction marvels to look at. However, that hasn't prevented SinoGulf Real Estate Investments L.L.C. from attempting to provide one more architectural icon to the area: the Abdali Views Tower.

Expected to be completed by late 2021, this residential tower has been designed to cover 35,500 m² (42,457.65 yd²) of ground, and it will house a swimming pool and 230 apartments. These features are relatively uncommon for a residential tower, but that's not what will make this particular structure stand out. The credit for that goes to the building's unique structure. To give it a distinct visual appeal, the Consolidated Consultants Group went with a statuesque frame and dazzling, opalescent windows. This structure would allow the tower to stand tall but appear to be fragmented into several vertical strips. Each vertical strip would be taller than the next, giving it a dynamic and playful, yet respectful feel. Such a design would make Abdali Views Tower a pleasure to both gaze at from the outside and spend time on the inside.

A number of families would likely enjoy living in such a unique space. But before that could happen, this new residence needed waterproofing. Without the right waterproofing, it would not be able to keep the water in the swimming pool from seeping through the concrete, and it would be vulnerable to water seeping through other areas as well. If water got far enough through the building's concrete, it would corrode the steel reinforcements within the building, weakening its structural integrity and creating a potential safety concern for those living there. At the same time, however, the building had limited space for the protection of an external waterproofing membrane for its raft foundation and six basement retaining walls. So SinoGulf Real Estate Investments L.L.C. needed a more innovative waterproofing solution.



SMART CONCRETE®



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SOLUTION

That solution turned out to be Kryton's Smart Concrete® waterproofing system. Specified early on by the Abdali Views Tower construction team, this system included KIM, Kryston Waterstop Treatment, and Krytonite Swelling Waterstop. Combined, these products allowed the team to fully waterproof the tower's raft foundation slab, retaining walls, water tanks, swimming pool, construction joints, and tie holes. As part of that process, the team used around 6,300 m³ (30 tons) of KIM as a complete and permanent replacement for an external waterproofing membrane. That way, they didn't have to spend additional time and money on picking and buying a membrane and hiring enough labor to apply it. They also wouldn't have to worry about not being able to build right up to the property edge. Instead, they were able to build right up to the property edge of the tower by adding KIM, a concrete waterproofing admixture, directly into the concrete mix that would be part of the tower's raft foundation slab, basement walls, water tanks, and swimming pool. The Kryston® technology within the admixture then spread throughout the mix, giving the concrete the ability to create a chemical reaction that blocks water from passing through it.

With such a streamlined waterproofing process, the team was able to speed up their construction schedule. They were also able to employ it in a cost-effective manner by applying Kryton's split application method (a bottom and periphery treatment). That involved placing a layer of KIM-treated concrete around regular concrete. So there wasn't as much treatment needed, but the team could still provide the tower with enough waterproof concrete to prevent any water penetration and corrosion concerns.

It was the first time this method had ever been used in Jordan. But it went as smoothly as it did when it came time for the construction team to waterproof all the construction joints and tie holes. To do that, the team first applied 1,457 m² (1,742.56 yd²) of Kryston Waterstop Treatment, which uses the same Kryston technology as KIM, to protect the joints and details from any incoming moisture. Then, they added 3,400 m (3,718.29 yd) of Krytonite Swelling Waterstop over top, which would provide swelling performance to seal any gaps and stop water penetration.

In the end, with KIM and the combination of Kryston Waterstop Treatment and Krytonite Swelling Waterstop, the Abdali Views Tower got the innovative waterproofing solution it needed. This solution was thorough, permanent, less labor-intensive, and best of all, affordable. After seeing those benefits and more in action for themselves, Arab Towers Contracting Co. didn't hesitate to recommend Kryton's Smart Concrete waterproofing system to the construction team for the neighboring Istishari Hospital Car Park. In fact, they offered such a glowing review that Kryton went on to waterproof that structure as well.

