

The Arc

Vancouver, Canada (2017)

BACKGROUND

The Arc, a new apartment building at the northern foot of the Cambie Bridge, is set to become a stunning visual gateway for one of the entrances into downtown Vancouver. The 288-foot-tall, 29-storey property consists of two tower forms linked together by an eight-storey span which will support the condominiums above as well as a Club. The building was designed to the 100-year flood event requirement, necessitating a waterproofing solution of the highest quality and durability. After a thorough review of performance and long-term benefits, Kryton's Krystol Internal Membrane (KIM) Waterproofing System was chosen as the optimal solution.

SOLUTION

To provide a permanent waterproofing solution, the design team specified concrete treated with KIM for all the below grade walls. As a PRAH (Permeability Reducing Admixture – Hydrostatic Conditions), KIM eliminates the need for surface applied membranes and provides a more permanent waterproofing solution. It is able to self-seal cracks that develop over the lifespan of the structure. To complete the waterproofing system, the project team used Krytonite Swelling Waterstop and Krystol Waterstop Treatment on all the below grade construction joints. The Krystol Waterstop Treatment is a cementitious crystalline slurry that contains Krystol technology. The Krystol chemically reacts with water and un-hydrated cement particles to form insoluble needle-shaped crystals that fill capillary pores and micro-cracks in the concrete blocking pathways for water. Krytonite Swelling Waterstop was applied on top of the Krystol Waterstop Treatment. It is a synthetic rubber waterstop that uses swelling pressure to seal concrete construction joints and stop water. Krytonite Swelling Waterstop has superior swelling pressure and performance that stops water better than Bentonite and other competing swelling waterstops. It is extremely durable and will not deteriorate over time.

OWNER / DEVELOPER:

Concord Pacific

ARCHITECT:

Franci Architecture

CONTRACTOR:

Centerville

ENGINEER:

JRS Engineering

DISTRIBUTOR:

Cascade Aqua-Tech

PRODUCTS:

Learn more at kryton.com
 Krystol Internal Membrane™ (KIM®)
 Krytonite™ Swelling Waterstop
 Krystol Waterstop Treatment™



Krystol Waterstop Treatment is applied before the Krytonite Swelling Waterstop. The combination of the two products offers proven long term waterproofing protection.



A view into the below grade construction