

# The Concord

Calgary, Alberta, Canada (2019)

## BACKGROUND

The Concord is a 14 storey tower in South West Calgary being built right on the shores of the Bow River. The property will have 218 suits and is raising the standard for luxury condominium development in the area. The Concord is being constructed in an area that has a very high water table and is part of a flood zone. During the 2013 Alberta floods the East Village area suffered significant flooding. The construction team knew they needed a superior performing concrete waterproofing solution to secure their four levels of underground parking. After a review of performance and benefits, Kryton's Krystol Internal Membrane (KIM) admixture and an externally applied membrane were selected as the best solutions. With two waterproofing systems in place for all the underground concrete the project team wants to ensure zero ingress of water.

## SOLUTION

For permanent concrete waterproofing, Krystol Internal Membrane (KIM) was used in the concrete mix for the below grade (underground) structural shotcrete walls and the 5-foot raft slab. Once in place, the Krystol® technology inside KIM starts a chemical reaction which results in needle-shaped crystals that fill capillaries and micro-cracks in the concrete. KIM is designed to withstand high hydrostatic pressure and grows increasingly effective over the lifespan of the structure.

To complete the waterproofing system, the team used Krytonite Swelling Waterstop and Krystol Waterstop Treatment on all the below grade construction joints. Krytonite is a synthetic rubber waterstop that uses swelling pressure to seal concrete construction joints and stop water. Krytonite has superior swelling pressure and performance that stops water better than Bentonite and other competing swelling waterstops. The Waterstop Treatment is a cementitious crystalline slurry that is applied to horizontal and vertical construction joints to provide waterproofing and protect rebar from corrosion. All the Kryton products combine to form a complete waterproofing system. The project team is claiming that the Concord includes state of the art flood protection and Kryton is proud to be one component in that broader protection system.

### OWNER:

Concord Pacific

### ARCHITECT:

Arthur Erikson

### CONTRACTOR:

Centreville

### DISTRIBUTOR:

Cascade Aqua-Tech

### READY-MIX:

Inland (Lehigh-Hanson-Heidelberg)

### PRODUCTS:

Learn more at [kryton.com](http://kryton.com)

Krystol Internal Membrane™ (KIM®)

Krytonite™ Swelling Waterstop  
Krystol Waterstop Treatment™



KIM increases reliability and quality control.



Kryton's concrete waterproofing system protects against leaks, even with the building's proximity to the river.