

Vancouver Convention Centre

Vancouver, British Columbia, Canada (2009)

BACKGROUND

The award-winning Vancouver Convention Centre's new West building boasts 338,000 ft² of function and meeting space and has become a showpiece of architecture, construction and sustainability. Key design elements include a six-acre "living roof" that houses thousands of indigenous plants. About 40% of the building is suspended over water with the foundation specifically designed to recreate a natural shoreline for marine life. To ensure their beautiful facility would be around for decades the project team decided to look for a solution that would enhance the lifespan of the exhibition facility's concrete and create cost savings for the owner.

SOLUTION

Ocean recommended Hard-Cem as a durability solution for this project because its full depth hardening capability provided everything the team had been looking for. The large concrete floor area required a uniform product placement that would not delay construction. Hard-Cem is added to the concrete at the time of batching, eliminating any additional labour, time or quality control needed with other hardening options. When added to concrete, Hard-Cem's proprietary technology increases the hardness of the concrete paste and reduces fine and coarse aggregate exposure that creates the degradation of concrete surfaces. Since it is integral, it continues to offer surface wear resistance throughout its life. By increasing the abrasive service life of concrete up to 600%, maintenance costs are reduced and replacement of the concrete is substantially deferred.

This abrasion resistance enhancer was an excellent option for this environmentally friendly facility as its use typically qualifies for credits towards the Leadership in Energy and Environmental Design (LEED) Green Building Rating System. In 2010, the Vancouver Convention Centre achieved LEED Platinum certification and in 2017, it achieved a LEED Platinum certification for Operations and Maintenance, becoming the world's first double LEED Platinum certified convention centre.

OWNER:

Vancouver Convention and Exhibition Centre

CONTRACTOR:

PCL Constructors Westcoast Inc.

READY-MIX:

Ocean Construction Supplies

Total Area:

20,717m² (223,000 sq. ft)

PRODUCTS:

Learn more at kryton.com
Hard-Cem®



Hard-Cem expedites construction schedules because it is added right at the time of batching, no extra time or labor needed.



The completed convention centre with concrete that is hardened for the full depth.