

Metro Skate Park in Burnaby, British Columbia

Hardener With Air Entrained Concrete? It's Now Possible With Ocean's HardCrete!



Photo model courtesy of space2place design inc. It looks very realistic, but this is a computer-generated 3-D model of the innovative skate park being built with Ocean's abrasion-resistant HardCrete.

The Metro Skate Park in Burnaby, BC, a suburb of Vancouver, is unique in two ways. Jeff Cutler, landscape architect with space2place design inc., stated, "It is the first landscape architect project to use High Volume Fly Ash (HVFA) concrete." This project utilizes up to 40% fly ash in certain mixes. It is also the first project to use Ocean's HardCrete. Ocean's HardCrete utilizes an integral hardener to increase abrasion and impact resistance of the concrete.

One of the benefits of using Ocean's HardCrete is the addition of the hardener at the ready-mix plant directly into the concrete. This improves the consistency of the product throughout the load.

A second benefit is the ability to provide air entrained concrete for external applications. Previously, this has not been possible. Because of the ability to use HardCrete with or without air entrainment, however, it is very versatile and can be used in almost any application.

You may ask, Why does a skate park need concrete with an integral hardener? For a very practical reason. The skate park is not used just by skate boarders, but also by BMX or freestyle riders. Anyone familiar with freestyle bikes knows about the hardened metal pegs attached to the frame on either side of both tires. These metal pegs are often used as guides along the bowl edge during stunts. But when a stunt goes bad, these pegs and pedals can impact the concrete at relatively high speeds.

Because of the obvious abrasion and impact resistance required, Ocean's HardCrete was a natural fit. HardCrete offered the owners, City of Burnaby, and the landscape architect Jeff Cutler exterior concrete with superior abrasion and impact resistance.

Cutler explained that the potential cost savings to the owner because of reduced repair work was a positive factor in allowing HardCrete to be used. He said that the slightly darker grey concrete color is also an advantage to the park users because it produces less glare.

"This project is a balance of practicality and recycling." Cutler said. The HVFA concrete and Ocean's HardCrete utilizes waste by-products that would otherwise end up being landfilled.

Owner: The City of Burnaby
Landscape Architect: Jeff Cutler