

# TTC's McNicoll Bus Garage

Scarborough, ON, Canada (2020)

PRODUCT USED:  
**Hard-Cem<sup>®</sup>**

**OWNER:**

Toronto Transit Commission

**ARCHITECT:**

Strasman Architects Inc.

**ENGINEER:**

Morrison Hershfield

**CONTRACTORS:**

Buttcon Ltd.  
Eastern Construction Co. Ltd.

**DISTRIBUTOR:**

Form & Build Supply

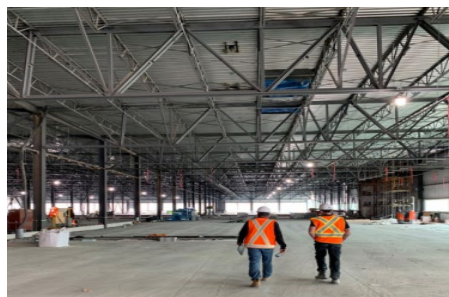
## BACKGROUND

By 2017, the demand for transit ridership in Scarborough had increased significantly. The local bus garages at the time were overloaded, and it didn't help that some of the Scarborough buses needed maintenance in the west end of the city. That resulted in multiple out-of-service hours for transit riders as they had to wait for buses to transfer to and from their routes.

Committed to better transit service and accommodating a growing ridership, the Toronto Transit Commission (TTC) wanted to resolve Scarborough's transit troubles. To that end, the organization decided to expand the number of bus garages available with the creation of the McNicoll Bus Garage. However, this new garage would not only alleviate Scarborough's capacity issues. The TTC aimed to design it so that it could increase operational efficiency in the area and improve customer experience. As a result, the bus garage would offer a number of beneficial features. These would include indoor storage for 250 buses; a repair bay with 14 hoists, two inspection pits, two service lines with exterior wash system, a paint and body shop, and more; a bus cleaning area; employee amenities; a transportation office; and a parking lot to support 350 on-grade car parking spaces for staff and visitors.

Moreover, the bus garage would also incorporate the standards of the Accessibility for Ontarians with Disabilities Act and more than meet the Toronto Green Standard for sustainable design. That way, anyone who needed to enter the bus garage, disability or no, would be able to do so and would find themselves in a more eco-friendly environment.

All of which was scheduled to be functionally ready by 2020. However, the TTC first needed a product that would work with their bus garage's C1-exposure concrete to give it the durability to withstand surface abrasion, salt penetration, and the local freeze-thaw cycles.



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## SOLUTION

Due to its versatility, Kryton's Hard-Cem works well with any concrete mix while enhancing its durability, making it a great solution for the new bus garage. With that in mind, Kryton Distributor Form & Build Supply recommended it, and it didn't take long for TTC to agree.

In the end, the construction team added Hard-Cem to the concrete, which increased the hardness of the concrete paste and reduced the fine and coarse aggregate exposure, giving the McNicoll Bus Garage a concrete structure that would perform well against any forces that might otherwise wear it down.

