NITROcrete

Bay Street CIBC Square
Toronto, ON, Canada
Case Study

Unlike conventional cooling methods, NITROcrete consistently managed concrete temperatures in this demanding, high performance project.

JOB

In the heart of Toronto's financial district, with views of the city skyline and Lake Ontario, a pair of cutting-edge office towers are being constructed on a 3 million square foot downtown architectural complex. CIBC Square will feature two iconic glass buildings of 49 and 50 stories connected to each other by an elevated one-acre park straddling the rail corridor. The first tower, 81 Bay Street, will house the Canadian Imperial Bank of Commerce and is slated to open in 2020. This joint venture between Ivanhoe Cambridge and Hines with EllisDon as the general contractor is targeting LEED Platinum certification with maximum efficiency and state-of-the-art infrastructure.

Zero loads rejected.

NITROcrete is the same temperature at the job site as it was at the batch plant.

CHALLENGE

Constructing two center-core wall structure towers in a high-density, urban location must have minimal impact on the surrounding downtown businesses, traffic, stadium and activities. In addition, the strict temperature restrictions requires concrete temperatures to be no higher than 25˚ C (77˚ F). Keeping the concrete within its required temperature range became a major concern because locally produced cementitious material resulted in abnormally high temperatures at the batch plant. The long transit times in the congested and unpredictable city traffic, along with the mass concrete elements, added to the challenges of keeping the concrete temperature within the required specifications.

SOLUTION

The strict temperature restrictions combined with a high cement, low water, high performance mix, (80 mpa/11,500 psi) created cooling requirements that conventional methods could not achieve. NITROcrete's unique ability to not only lower and control concrete temperatures, but also hold concrete temperatures for a longer duration than other methods, continues to be pivotal in providing in-spec concrete to the jobsite – where ready mix truck travel times can vary significantly in the unpredictable Toronto metro traffic.

Take Charge of Your Cooling.

www.nitrocrete.com
970.587.7863

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