Sugar Wharf (Phase I), Toronto, Canada

Wind Engineering Study

Image Credit: Menkes

Client	*Structural Engineer*	*Architect*
Theakston Environmental	Stephenson Engineering Ltd.	Architects Alliance
Height	*Year Tested*	*Model Scale*
218 m - 230 m	2018	1:400

The Project

The Sugar Wharf Phase I is in the Toronto's waterfront neighbourhood, at 55 Lakeshore Boulevard East, Toronto. The proposed residential development consists of 2 towers that sit atop an extensive 38 m tall podium. The towers are 64 and 70 stories tall rising to a total elevation of approximately 218 m and 230 m above grade, respectively.

The Wind Tunnel Studies

The wind engineering studies for the Sugar Wharf Phase I included a study of the wind-induced structural loads and responses, and local cladding pressure loads

The study of overall structural loads and cladding pressures were carried out using a pressure model containing 757 pressure measurement locations distributed over the 2 towers.

The Boundary Layer Wind Tunnel Laboratory

Western

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