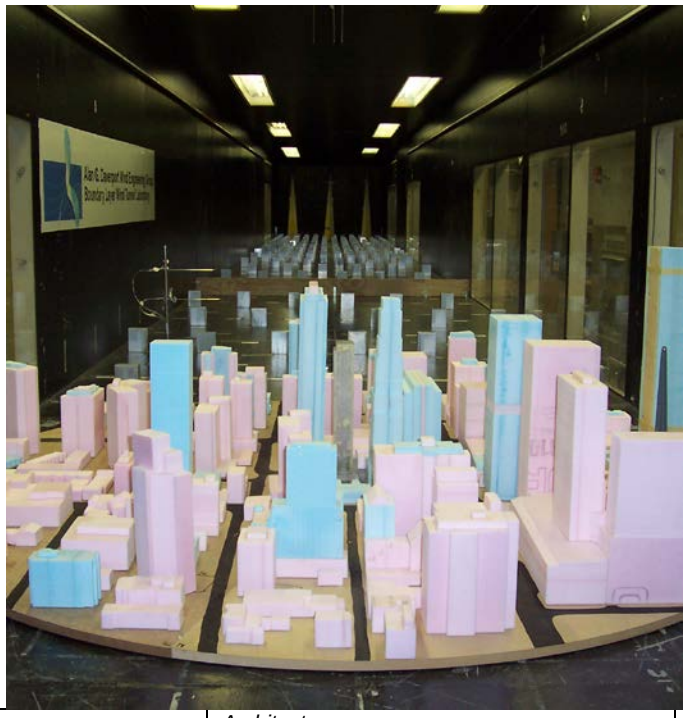
Crystal Blu, Toronto, Ontario

Wind Engineering Study



Client	Structural Engineer	Architect
Theakston Environmental	Jablonsky, Ast and Partners	Burka Varacalli Architects
Height	**Year Tested**	**Model Scale**
120m	2006	1:300

The Project

The project consists of a 34-storey condominium tower rising approximately 120m above street level. The project site is located on the east side of Balmuto Street and is just southwest of the intersection of Yonge and Bloor streets in downtown Toronto.

The tower features balconies on the east and west façades of the tower on all floors.

The Wind Tunnel Studies

The wind engineering studies on the Crystal Blu Tower included a study of the overall structural loads and responses on the building and the local external and differential pressure loads.

The study of overall structural loads and responses made use of the pressure integration technique.

Information on local cladding pressures was determined for the project. Measurements were taken at 296 locations over the tower. The pressure data collected on the unique 5-storey freestanding wall, near the base of the tower, was used to form net wind loads across the structure.

The Boundary Layer Wind Tunnel Laboratory

Western

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