Court Square Two, Long Island City, NY, USA

Wind Engineering Study

Rendering: Kohn Pedersen Fox Associates

Client	Structural Engineer	Architect
Tishman Speyer Properties	WSP Cantor Seinuk Group	Kohn Pedersen Fox Associates
Height	**Year Tested**	**Model Scale**
Phase 1 Tower – 220 feet Phase 2 Tower – 435 feet	2005	1:400

The Project

Court Square Two (formally Long Island City 2) is the second project developed as part of the Citicorp at Court Square development located in Long Island City, New York.

This portion of the development consists of one tower which is to be constructed in two phases. The Phase 1 tower is a 14-storey office building measuring about 220 feet above ground. Phase 2, when completed, would include the addition of about 22 floors of office and mechanical space extending the height of the tower to approximately 435 feet.

The Wind Tunnel Studies

The wind engineering studies for Court Square Two included studies of the wind-induced structural loads and responses, local cladding loads and a study of the pedestrian level wind environment.

The study of overall structural loads and responses were determined for both the Phase 1 & 2 towers using the force balance technique.

A study of wind-induced cladding pressures was carried out for 381 measurement locations (180 on Phase 1) distributed over the tower. Pedestrian level wind speed measurements were made at 27 locations.

A flow visualization study was conducted to investigate the airflow characteristics around the areas of the mechanical exhaust and intake locations.

The Boundary Layer Wind Tunnel Laboratory

Western

The Boundary Layer Wind Tunnel Laboratory
The University of Western Ontario
Faculty of Engineering, London, Ontario
Canada, N6A 5B9 Tel: (519) 661-3338 Fax: (519) 661-3339
Internet: www.blwtl.uwo.ca E-mail: info@blwtl.uwo.ca

FSTB / 266 /June, 2007 / AMW
Last Printed: March 19, 2009