Hearst Headquarters, New York, USA

Wind and Snow Engineering Study

Pressure Model

Balance Model

Builder Tishman Speyer Properties	*Structural Engineer* Cantor Seinuk Group Inc.	*Architect* Foster and Partners
Height 596 ft (42 storey)	*Year Tested* 2002	*Model Scale* 1:400

The Project

This project consists of a triangular accented office tower rising above an already constructed six-storey Art Deco low-rise building originally completed in 1928. The original project was halted due to the Great Depression and until now never completed. It has since been designated a New York Landmark.

Foster and Partners are the lead architects of the high rise tower to top off the original low-rise design. Adamson Associates are the associate architects.

This tower is located in the heart of Manhattan on Eight Avenue between 56th and 57th Streets.

The Wind Tunnel Studies

Information on structural loads and building motions for the tower was determined by using high frequency force balance.

Information on cladding pressures was determined for the tower and associated low rise. Measurements were taken at approximately 560 locations.

Wind-induced deflections were determined at specific locations due to the close juxtaposition to the Sheffield Building, located just to the west of the site.

Pedestrian level wind speeds were predicted at 18 locations around the site, emphasizing the main entrances and corner areas.

Predictions of snow and ice accumulations were provided, including potential sliding from sloped surfaces of the facade.

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FSTB/ 207 /January 2003 / RTE
Last Printed: September17, 2008