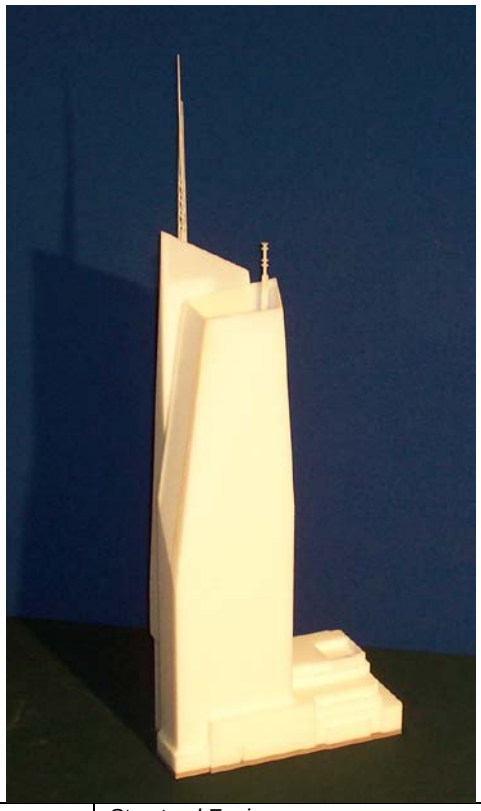
One Bryant Park Tower, New York, NY, USA

Wind Engineering Study



Client	Structural Engineer	Architect
Durst Org./ Israel Berger Associates	Severud Associates	Cook + Fox Architects, LLP
Height	**Year Tested**	**Model Scale**
944 feet	2004	1:400

The Project

The One Bryant Park Tower in New York, consists of a single tower rising 944 feet above street level. The rooftop spire rises an additional 256 feet. The building, also known as the Bank of America tower is located at the corner of West 42nd St. and the Avenue of the Americas.

The 52-storey office tower situated near Times Square is publicized as the world's most environmentally friendly high rise.

The Wind Tunnel Studies

The wind engineering studies for One Bryant Park included a study of the wind-induced structural loads and responses for the tower and the spire, local cladding pressure loads and pedestrian level winds.

The study of overall structural loads and responses was determined for the tower using the base balance technique. The loads on the spire were calculated using velocity and turbulence measurements and analytical techniques.

A study of wind-induced cladding pressures was carried out for 705 measurement locations distributed over the tower.

The pedestrian level wind study examined 25 locations around the tower.

The Boundary Layer Wind Tunnel Laboratory

Western

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