535 Mission Street, San Francisco, California, USA

Wind Engineering Study

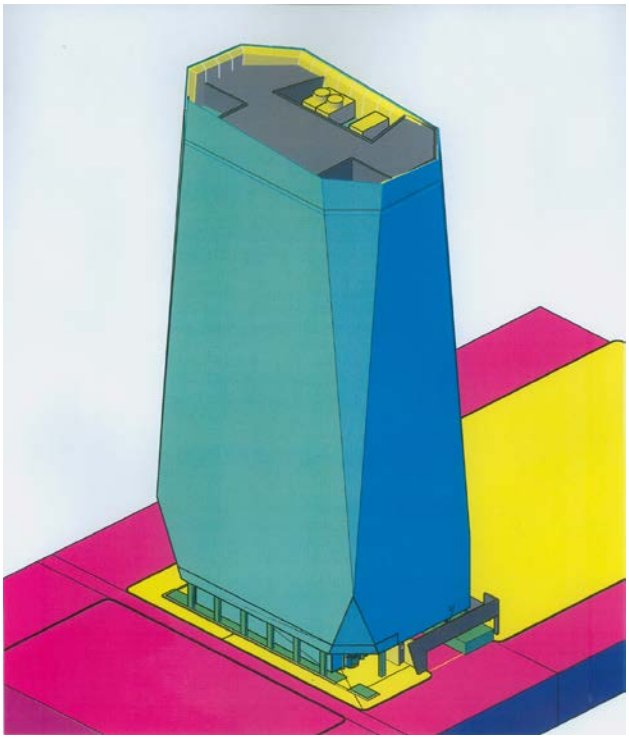

Image Credit: Beacon Capital HOK

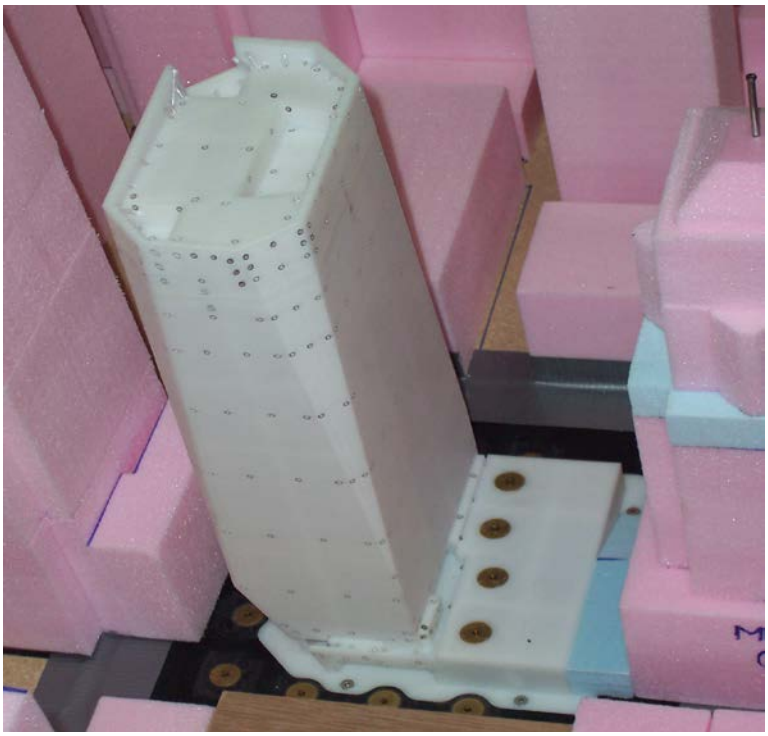

Photo of Pressure Model in Wind Tunnel

Client	*Structural Engineer*	*Architect*
Beacon Capital HOK	Middlebrook + Louie	Beacon Capital HOK
Height	*Year Tested*	*Model Scale*
379 feet	2007	1:400

The Project

535 Mission Street in San Francisco, California consists of one tower. The tower is a 26-storey office building and rises to a height of 379 feet. The site is located in north-east San Francisco and is bounded by Mission Street, Shaw Alley, Minna Street and 100 First Plaza.

The Wind Tunnel Studies

The wind engineering studies for 535 Mission Street included a study of the wind-induced structural loads and responses, local cladding pressure loads and pedestrian level winds.

The study of overall structural loads and responses was determined for the tower using the pressure integration technique.

A study of wind-induced cladding pressures was carried out for 401 measurement locations distributed over the tower.

A study of pedestrian level wind speeds was carried out at 17 locations around the site and 100 First Plaza.

The Boundary Layer Wind Tunnel Laboratory

Western

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FSTB/ 282 /March, 2008 / ZX
Last Printed: March, 19, 2009