Torre Libertad, Mexico City, Mexico

Wind Engineering Study

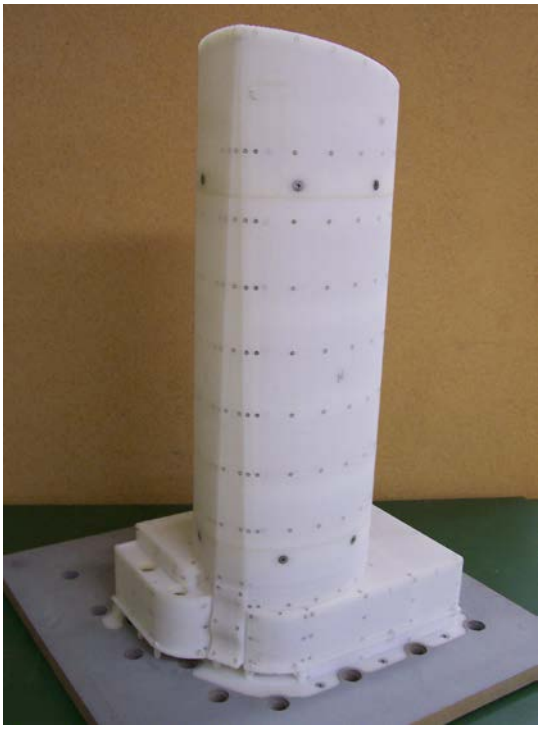

Image: Ideurban

Client	Structural Engineer	Architect
Grupo 1818	Ideurban	Ideurban
Height	**Year Tested**	**Model Scale**
147m	2005	1:400

The Project

The Torre Libertad development in Mexico City, Mexico consists of a single tower with mixed occupancy. The first 11 levels are hotel rooms and the top 15 levels are for residential use. The tower sits on a three-storey podium. There are support areas such as reception, lobby, retail, restaurants, ballroom and multi-function rooms distributed over the podium levels. The site is located on the intersection of Paseo de la Reforma and Mississippi Avenue.

The Wind Tunnel Studies

The wind engineering studies for Torre Libertad included a study of the wind-induced structural loads and responses, local cladding pressure loads and pedestrian level wind speeds

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

A study of wind-induced cladding pressures was carried out for 387 measurement locations distributed over the tower and podium.

A pedestrian wind-speed study was carried out to examine wind speeds at 21 locations around the project.

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

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