Torre Bora, Mexico City, Mexico

Wind Engineering Study

Image Credit: The 7th Art

Client	*Structural Engineer*	*Architect*
Nemesis Capital, Mexico	Garcia Jarque Ingenieros	Zaha Hadia Architects, Mexico City
Height	*Year Tested*	*Model Scale*
Building Height: 214m	2018	Pressure Model: 1:400

The Project

Torre Bora, is located between Avenida Santa Fe and Paseo de los Arquitectos, in the business district of Mexico City, Mexico. The development is a 52 storey mixed-use building, comprised of six vertical towers clustered around a central core. At its base the skyscraper flares outward over 10 storeys with a series of twisting canopies over pubic space below to be occupied by restaurants and shops facing onto the street.

Torre Bora is set to become Mexico City's tallest apartment complex with 220 units to accommodate a wide variety of demographics. The building is conveniently located next to the Mexicana park and within walking distance to schools, theatres, cafes and the metro hub.

The Wind Tunnel Studies

The wind engineering studies for Torre Bora included a study of the local peak pressures, including external and differential pressures, acting on the building envelope, determination of structural loads and responses, and pedestrian level wind speeds expected for areas around the building site.

A rigid model of the building was designed, constructed and instrumented for pressure measurements at 500 locations distributed over the tower and tested in turbulent boundary layer flow conditions for 40 wind angles.

The Boundary Layer Wind Tunnel Laboratory

Western

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