Jin Mao Tower, Shanghai, China

Wind Engineering Study

Client	Owners	Architect
Skidmore Owings & Merrill	Skidmore Owings & Merrill	Skidmore Owings & Merrill
Height	**Year Studied**	**Model Scale**
421 meters	1993	1:500

The Project

The Jin Mao Tower is an 88 storey landmark supper tall skyscraper. It is a multipurpose tower with offices, hotel and commercial space. It was completed in 1998. At its time of construction it was the tallest building in China.

The Wind Tunnel Studies

The wind engineering studies for the Tower included the determination of overall structural loads, cladding loads and pedestrian level wind studies.

The study of overall structural loads and responses were determined using the force balance technique and subsequently confirmed with a two-degree-of-freedom aeroelastic study.

The study of wind-induced cladding pressures was carried out for 730 measurement locations distributed over the tower.

A pedestrian level wind study examined 16 locations in and around the site.

The Boundary Layer Wind Tunnel Laboratory

Western

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