Saxony Hotel & Condominium, Miami Beach, FL, USA

Wind Engineering Study

Client	Structural Engineer	Architect
Patrinely Group LLC	CBM Engineering	Kerksey
Height	**Year Tested**	**Model Scale**
Renovated Saxony Hotel – 174 feet Saxony Tower – 220 feet	2005	1:400

Project

The Saxony is a condo-hotel project based on the original Saxony Hotel, a Miami Beach landmark for nearly fifty years. The development included a structural retrofit to the existing Saxony Hotel and a new 18-storey tower to the north. An extensive low-rise podium joining the two towers is also included.

The rental and condominium complexes will accommodate approximately 205 units.

The Wind Tunnel Studies

The wind engineering studies for the Saxony included a study of the wind-induced structural loads and responses and local cladding pressure loads.

A study of wind-induced cladding pressures was carried out for 684 measurement locations distributed over both towers and the podium.

The overall structural loads and responses were determined for the two towers using the loads from pressures technique.

The study of pedestrian level winds was carried out examining 35 locations with emphasis on the area between the two towers and their associated podiums.

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