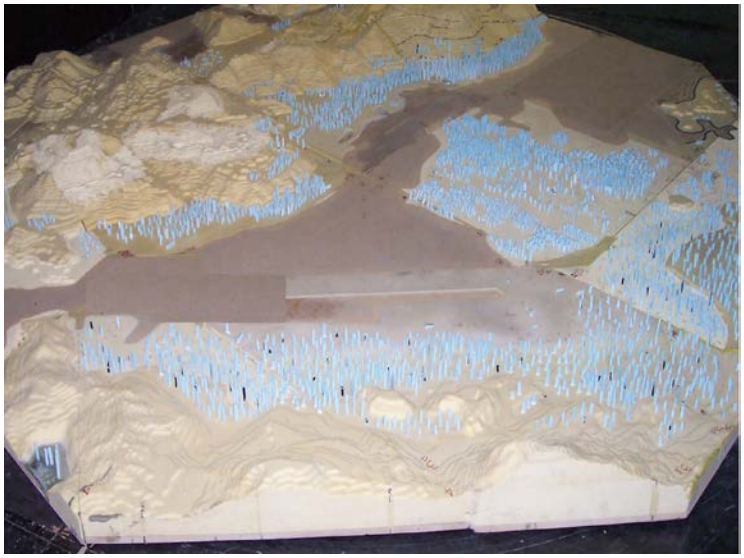
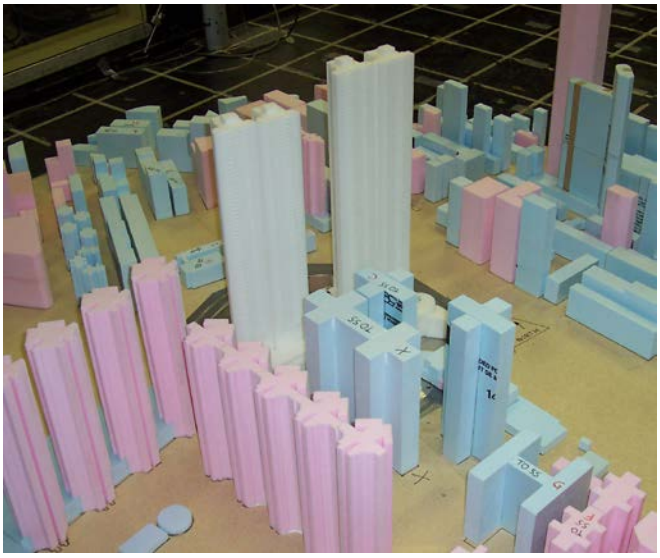
KIL 11167 & 11168, Tai Kok Tsui, Hong Kong

Wind Engineering Study





Client	Structural Engineer	Architect
Sino Land Company Ltd. Hong Kong	Maunsell Structural Consultants Ltd. Hong Kong	Ma Leung & Associates Hong Kong
Height	**Year Tested**	**Model Scale**
Two Towers at 227.35 m Two Towers at 248.35 m	2006	Force Balance Model - 1:400 Topographic Model - 1:3000

The Project

The proposed residential development at KIL No. 11167 and 11168 consists of four towers. All towers are located on the same podium. Towers T1/T2 are structurally connected and have the same height of 227.35 m above grade. Towers T3/T5 are structurally connected and have the same height of 248.35 m. Towers T1/T2 are not structurally connected with Towers T3/T5.

The project is located at the shore of New Yau Ma Tei Typhoon Shelter, Hong Kong.

The Wind Tunnel Studies

The wind engineering studies for the KIL No. 11167 & 11168 project included a study of the wind-induced structural loads and responses of all four towers using the force balance technique. The project is in a typhoon prone area and the site surroundings have significant topographic features such as mountains, open water and built-up urban. The effects of both typhoon and the topographic features were taken into account in this study.

A topographic model of the area surrounding the project site within a radius of more than 7 km was constructed which consists of the entire Hong Kong Island and Kowloon Peninsula. The topographic model study was performed to determine the wind characteristics at the project site.

The Boundary Layer Wind Tunnel Laboratory

Western

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