



香港城市大學
City University of Hong Kong

Hands-on experiences of wind tunnel tests and computer program for wind design

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Abstract:

There is a continuing worldwide trend towards flexible tall buildings, which are prone to damages caused by natural hazards. Hong Kong is one of the few cities, where tall buildings are easily found, and is situated in an active typhoon region. The associated typhoon high wind speeds are accelerated by the complex topography and are predominant in the engineering design of tall buildings, requiring unique design technique with special reference to wind tunnel testing. This project aims to mimic a real structural design project of a tall building in Hong Kong, from which students will have hands-on experiences and are subsequently familiar with the wind code design procedures, finite element modelling of tall buildings, and most importantly the wind tunnel testing technique utilizing the newly-developed wind tunnel in the City University of Hong Kong.