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Wind Comfort and Safety of People in the Vicinity of Tall Buildings

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Abstract : Tall buildings block and divert strong upper level winds to the ground. These high velocity winds many a time create adverse wind effects at ground level which can be uncomfortable and even compromise the safety of pedestrians and people who frequent the spaces in the vicinity of tall buildings. Discomfort can be experienced around the entrances and corners of tall buildings. Activities such as strolling or sitting in a park, waiting for a bus near a tall building can become highly unpleasant. For the elderly unpleasant conditions can also become dangerous leading to accidents and injuries. Today there is a growing concern among architects, planners and urban designers about the wind environment in the vicinity of tall building. Regulating authorities insist on wind tunnel testing of tall buildings in cities such as Wellington, Auckland, Boston, San Francisco, etc. prior to granting permission for their construction The present paper examines the different ways that tall buildings can induce strong winds at pedestrian level and their impact on people who frequent the spaces around tall buildings.

Keywords : tall buildings, wind effects, wind comfort, wind safety
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