



Wind Tunnel Facility

Services:

Building Acoustics

Wind and Snow Loading

Environmental Noise

Air Quality Studies

Structural Wind Loading

Wind Tunnel Testing

Cladding Pressures

Long Span Roofs

Control of Mechanical Vibrations

Computational Fluid Dynamics

Microclimate Engineering

Design of Mass Dampers

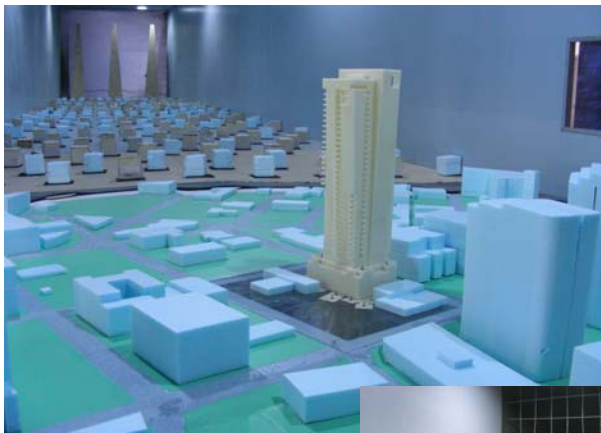
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Supported by increased demand, *GmE* is pleased to announce our expansion into a larger, privately owned wind tunnel facility for testing of physical scale models in atmospheric flow. The wind tunnel is a conventional flow-through type, having an overall length of 27 meters (m), and test section dimensions of 2.4 m long and 2.1 m by 1.8 m in cross section. The wind tunnel is supported with a variety of instrumentation to measure mean and fluctuating pressures, air velocities and dynamic forces. It is also supported with in-house computational fluid dynamics capabilities.

The facility can be used to investigate wind flows and related issues for:

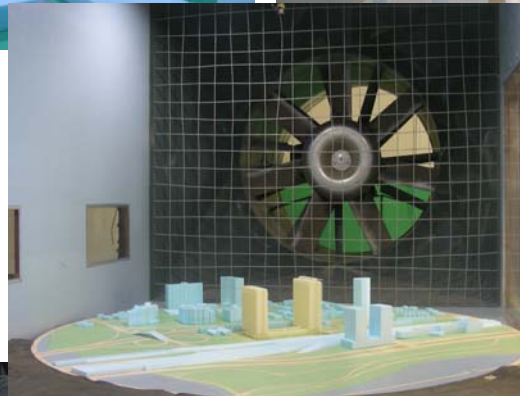
- ◆ Pedestrian winds, ground snow drifting;
- ◆ Roof snow accumulation and load estimation;
- ◆ Cladding pressures on buildings and other structures;
- ◆ Structural wind loads on tall and flexible structures;
- ◆ Air pollution dispersion from stacks, line and area sources around buildings;
- ◆ Wind flows over obstacles, drag and lift on aerodynamic or bluff objects.



View of Wind Tunnel Looking Upwind



View of Wind Tunnel Looking Downwind

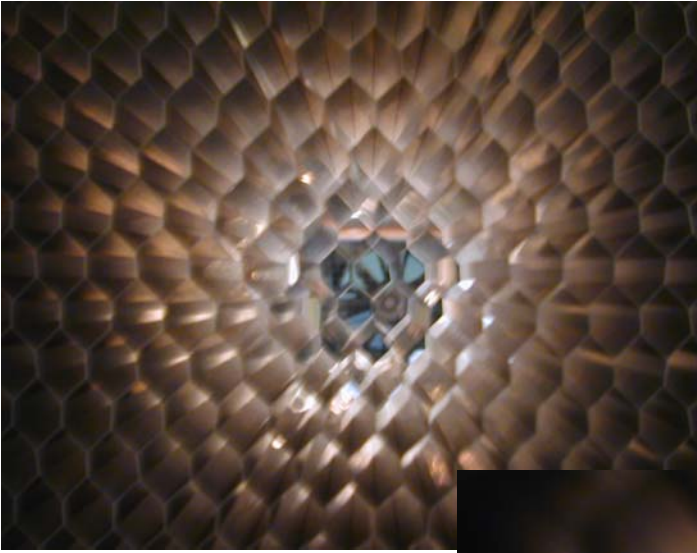


Aeroelastic Model of Long Span Roof For Aircraft Hangar





Wind Tunnel Facility



Wind Tunnel As Seen Through the Honeycomb Screen



Topographic and City Model in Wind Tunnel



Control of Pedestrian Winds by Landscaping. Sensors Located Along Pathways

