

### Contributions Considering the Concept and Design of Multi-Storey Steel Structures

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#### Summary

The envelope of high buildings with steel or steel and reinforced concrete structures is very sensitive to wind dynamic action. The thesis presents the authors results of the extensive studies and also the interpretation of fluctuating pressures on static models of high buildings placed in urban areas. An important number of data were obtained by modeling and measurements in boundary layer wind tunnel.

Thorough methods of interpretation were developed based on modern concepts of evaluating the wind action on the surface of bluff bodies by determination the instantaneous values of wind local pressure and processing the date with the computer aids.

**Keywords:** Boundary Layer Wind Tunnel, Curtain walling, Fluctuating wind pressure, Modeling, Statistical processing

