

CPP HISTORY

Modern wind engineering began in the 1950s with the work of Dr. Jack Cermak, his colleagues, and students. As a professor and researcher at Colorado State University, Dr. Cermak pioneered now-standard methods of modeling and testing pollutant dispersion and the effects of wind on buildings and structures. In 1964, his laboratory tested the design of the World Trade Center Twin Towers in New York City, bringing wind engineering to the attention of architects and engineers around the world.

In 1981, Dr. Cermak and Dr. Jon Peterka co-founded America's first commercial wind engineering company. Three years later, Dr. Ron Petersen joined and the company was renamed Cermak Peterka Petersen (CPP). Since its founding, CPP has been lead by the most experienced wind engineers in the world.

CPP provides its full range of wind engineering services to clients around the world. Now, with leading experts located in Australia and the United States, CPP's expertise is even more accessible and convenient.

Some services include:

- Structural wind loads
- Wind effects on cladding
- Motion damping systems
- Pedestrian-level winds
- Exhaust dispersion
- Natural ventilation
- Wind energy services

Full-scale Measurement Services

CPP engages in a number of full-scale measurement programs, covering all types of wind issues.

These include:

- CPP's own full-scale test facility for testing building components
- Monitoring tall building motion and deflections
- Monitoring wind conditions in the field and on construction sites
- Full-scale verification of wind turbine performance

MONITORING THE BURJ KHALIFA

CPP is pleased to announce that we have been awarded the contract for the Building Motion Monitoring System for the Burj Dubai Tower. At 828 m in height, Burj Khalifa is the world's tallest building and CPP has been engaged to monitor its performance under seismic and wind loading conditions. These measurements will form an integral part of the Building Management System as well as provide a direct comparison between predicted and actual performance during extreme wind or seismic events.

As part of this project, CPP is installing monitoring equipment throughout the building to give an overall picture of any building motion and the causes of that motion. The outputs from accelerometers, anemometers and GPS systems will be locally and centrally logged, with both raw data and key statistics delivered in real time to key members of the operations and design teams through customized user-friendly Internet interfaces.

CPP is delighted to be playing a key role in conducting the measurement work for this landmark project, work that will advance the structural design of super-tall buildings in years to come.

