Atlantic II Building, Atlanta, GA, USA

Wind Engineering Study

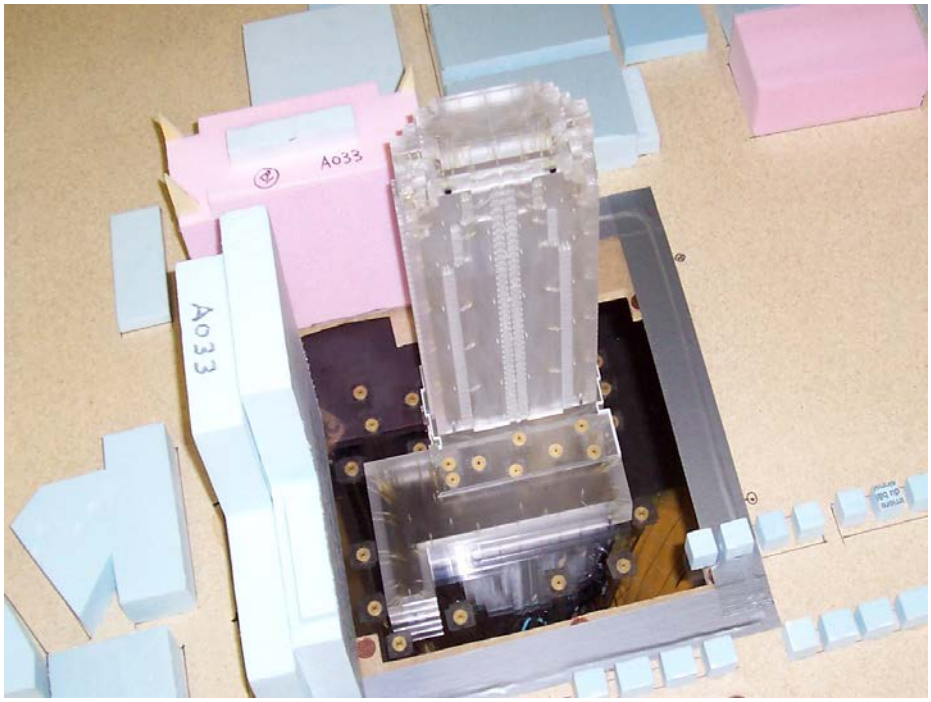

Image Credit: Smallwood, Reynolds, Stewart, Stewart & Associates, Inc.

Client	*Structural Engineer*	*Architect*
Novare Group	Stanley D. Lindsey and Associates, Ltd.	Smallwood, Reynolds, Stewart, Stewart & Associates, Inc.
Height	*Year Tested*	*Model Scale*
46 storeys, 571.7 ft	2006	1:400

The Project

The project consists of a 571.7 ft condominium tower from P4 level (and 531.7 ft tall from the local 17th street level) and an L-shaped parking podium. The tower above the podium level resembles a basic rectangular shaped section with symmetric recesses on the top few floors.

The building is located on the south side of 17th Street Extension, bordered by State Street to the west and 16th Street to the south.

The Wind Tunnel Studies

The wind engineering studies for the Atlantic II project included a study of the wind-induced structural loads and responses, local cladding pressure loads and pedestrian level wind conditions. A desk-top study of the preliminary structural loads was also performed.

The study of overall structural loads and responses was determined for the building using the force balance technique.

The study of wind-induced cladding pressures was carried out for 642 measurement locations distributed over the tower and podium. Pedestrian level wind speeds were determined at 26 locations on the podium and around the project site.

The Boundary Layer Wind Tunnel Laboratory

Western

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