

CentrePort, Wellington City Harbour

Scope of Work

This building is the first in a series of buildings to be built on reclaimed land at Wellington's Port.

- It has five stories and is occupied by the Statistics Department
- Six hundred staff use the five floors and the entire building is run on a variable air volume system
- Most of the offices use an open plan layout with more than 180 variable air volume boxes being controlled by a centralised computer system.



Engineering Features

Three air handler units pump air into the building and over 180 variable air volume boxes monitor air flow throughout the offices on each floor.

The system was chosen for its energy efficiency. Half of the fifth floor houses the plant room containing:

- 2 x chillers
- 2 x cooling towers
- 2 x boiler
- A BMS control and energy management system with web based monitoring facility

McAlpine Hussmann was also responsible for pipe work used to distribute natural gas into the building .

Project Highlights

The building has been studied by the NZ Green Building Council as a test case for energy efficiency and sustainability, towards establishing a Green Star rating.

- One of the interesting aspects of the design was the installation of an earthquake sensor, which is designed to shut off gas to the building, should it be activated.
- The web-based integrated air conditioning and energy management system provides instant access for remote monitoring, diagnostic and control adjustments.
- The system incorporates various energy efficiency features including utilising the Cooling Tower Pond water as cooling medium during cooling demand in "shoulder" season.