

## Q Theatre, 305 Queen Street, Auckland

### Scope of Work

In 1996 Auckland's Watershed Theatre closed to make way for the America's Cup yacht race. A subsequent study by the Auckland City Council in 1997 determined that the city lacked a central, 350-450 seat, flexi-form performing arts venue.

This was at the genesis of the building of the Q Theatre on the Queen Street site. Its two flexi-form performance spaces create entirely contrasting experiences. They are in the newly built and developed part of the site at the back of the original Citizen's Advice Bureau Building. There are two social spaces built in the old part of the building, Citizen Q - the café and the Lounge bar and bistro.

McAlpine Hussmann was contracted to Naylor Love for the installation of an energy efficient air conditioning system for the multiple spaces.



### Statistics

Project Start : March 2010  
Project Finish : August 2011 :  
Value : \$1.6 Million



### Engineering Features

- A 400KW 4-pipe heat pump heat recovery chiller with relevant pumping and distribution systems
- A set of three Air Handling Units with variable air volume delivery serve the two auditoriums and the front of house areas.
- Positive displacement air distribution grilles used for large auditoriums and the front of house areas.
- Positive displacement air distribution grilles used for the large auditorium.
- The back house and meeting areas are served by a set of 20 fan coil units.
- A variable refrigerant volume Dx heat recovery air conditioning system serves the cafe areas.
- Cool room and Freezer Room refrigeration services are installed as part of the project.
- A fully integrated control system with energy monitoring facility is installed to control all of the mechanical and refrigeration services.