

## Norfolk Southern Cross Hospital, Tauranga

### Scope of Work

Norfolk Southern Cross Hospital is a new private orthopaedic hospital in Oropi, Tauranga offering medical services including orthopaedic surgery to its clients.

The project includes:

- Supply of all heating, ventilation and air conditioning
- Supply of Medical gase
- Installation of a scavenging and vacuum system
- Radiators
- Kitchen coolroom and freezer room
- Steam system for sterilization of tools



### Engineering Features

Two chillers supply chilled water to 14 air handler units throughout the complex. Special design features for this medical environment include:

- Each operating theatre (there are 6 in total) has its own unit that supplies a “laminar flow” air to its operating area
- Extract systems are also used to extract unwanted air, maintaining a clean air blanket over the operating area.
- Specialised medical gases are circulated throughout the building - includes oxygen and nitrous oxide stored in bulk gas cylinders on site.
- A scavenger system is used to extract used medical air out of the operating areas.

### Project Highlights

- A special feature of this project was the fact that the hospital is built on a hill, and was given height restrictions due to neighbouring residents, and the zoning of the area.
- This meant all the services were housed in limited space in the false ceiling, and contractors had to work together in close quarters for proper coordination before installation.