

# Calorex Pro-Pac and 34 range

Calorex heat pumps provide a sustainable heating solution which, compared to fossil fuel or direct electric systems, will dramatically cut operating costs and carbon emission.

## Maids Head Hotel

The Maids Head Hotel in Norwich is installing a new hi-tech environmentally friendly £300,000 energy efficient capillary heating and cooling system in 46 bedrooms in the oldest part of the hotel.

The system, slashing fuel bills by a third, will feature a pair of bespoke Calorex Pro-Pac reverse cycle heat pumps tailored to keep rooms warm in winter and cool in summer.



The Maids Head is the first hotel in Norfolk to install the system, which features capillary mats hidden in the bedrooms' ceilings and some 2000 metres of piping connecting the capillary mats to the heat pumps, which will drive hot and cold water throughout the piping; temperature is controlled by a dial in each bedroom. The units will be sited on the building roof, causing minimum disruption to the fabric of the ancient structure.

Christine Malcolm, general manager at the Maids Head Hotel said: "We are developing a range of sympathetic refurbishment and renovation projects to ensure that our historic hotel meets the expectations of 21st century visitors.

"The new capillary heating system will give guests cutting edge year-round

temperature control in part of the hotel, which dates from the 15th century. It will also have the added benefit of reducing heating costs in an environmentally friendly way."

## Radisson Hotel Bangkok

Investment in a new air to water heat pump, heat recovery system will be paid back within four years for operators of the 428-bedroomed luxury Radisson Hotel, in Bangkok.

BTP Thailand, a specialist mechanical and engineering company, has successfully completed the installation of seven AW1534BH units supplied by Calorex.

Previously, the hotel had used an oil-fired boiler system. Now they run on 100% heat pump technology with the boiler only required for back up. The new, energy efficient system generates free cooling, via a ductwork system, for areas that had previously suffered with extreme heat problems such as the laundry room, lift control room and the lobby.



The AW1534 is one of a range of floor standing heat pumps that extract energy from an air source and upgrade this energy to a useable form of heat that is rejected to a water system. Unlike other water heating systems, a Calorex heat pump is capable of delivering up to five times more energy than it consumes.

Calorex heat pumps are simple to install, require little maintenance and alleviate the need for fuel storage tanks and flues that are normally associated with fossil fuel heating systems.

With lower CO<sub>2</sub> emissions than boilers, heat pump technology is the preferred heating choice of many government bodies and professional associations due to their low impact on the environment.

BTP has represented Calorex in Thailand for more than ten years, carrying out many successful installations as specialist designers, suppliers and installers as well as providing first class service back up.

## Holiday Inn Park View Hotel Singapore

Investment in a new air to water heat pump, heat recovery system will save 1.3 million kWh of energy every year for the operators of the four-star Holiday Inn Park View hotel in Singapore.

Five Calorex air to water heat pumps have been installed to provide the entire hot water requirements of the hotel.

Previously the hotel used steam boilers and calorifiers to provide the hot water requirements of the 314 guestrooms and 29 suites as well as the service areas such as the busy kitchens.

Since efficiency of the boilers is typically 80 to 85%, 1 unit of input energy can



only provide 0.8 to 0.85 units of useful heat energy for producing hot water. In comparison, heat pumps which can produce hot water using the vapour compression refrigeration cycle have a much higher efficiency.

The AW7034BH is one of a range of floor standing heat pumps that extract energy from an air source and upgrade this energy to a useable form of heat which is rejected to a water system. Unlike other water heating systems, a Calorex heat pump is capable of delivering up to five times more energy than it consumes.





Holiday Inn Hotel, Singapore

The Calorex range of hot water heat pumps are a quality range of packaged units specifically designed for hot water heating to 68°C and are the leading choice for heating and hot water in hotels, hospitals, industrial spaces, nursing homes, restaurants, schools and more.

#### **Calorex Pro-Pac range**

Pro-Pac heat pumps can be installed outside or in a plant room that has adjacent outside walls. Pro-Pac can be supplied with high speed axial fans.

#### Calorex 34 range

Designed for outdoor or plant room installation, all 34 range are provided with centrifugal fans as standard. A choice of fan external static pressure offers flexible installation and an ability for the units to provide cold air through a ducted system.

