



# CIAT Chillers and Heat Pumps Installed at innovative James Paget University Hospital's Innovative New Modular Ward



**CIAT chillers and heat pumps were installed at James Paget University Hospital's £15 million new modular ward in Norfolk, a facility that will help shape construction of future National Health Service (NHS) hospitals in the UK. The hospital team is using the ward as a case study for the wider NHS Trust to trial various design principles and investigate outcomes for patients, infection control and impact on staff.**

Two AquaCIAT™ LD chillers with air-source heat pumps are used for heating and two AquaCIAT Caleo heat pumps deliver hot water for the 28-bed concept decant ward. The high specification project was carried out to Health Technical Memorandum (HTM) guidelines, which include detailed requirements on the design, maintenance and operation of ventilation in healthcare premises. The ward provides an innovative and new environment for patients while ongoing remedial work takes place at James Paget Hospital, ahead of a planned new hospital on the site scheduled for 2030 as part of the government's New Hospital Programme.

“Infection control is vital in any healthcare environment,” said Laurie Moulding, Technical Manager with Health Spaces, the design consultant for the James Paget University Hospital project. “One hundred percent fresh tempered air needs to be delivered to each ward and isolation area at up to 15 changes an hour. This creates a constant cooling or heating demand depending on the season, which the CIAT chillers and heat pumps successfully deliver. The energy efficiency of heat pumps is also a considerable benefit for hospitals – they are extremely energy-efficient and classified as renewable energy.”

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The chillers are based on quiet-running scroll compressors, which deliver on the ward’s need for decibel levels to be kept low for patients to rest. The heat pumps and chillers, running on a low global warming potential (GWP) refrigerant, will help the NHS meet their 2040 net zero goal. The CIAT units have a Building Research Establishment Environmental Assessment Method (BREEAM) excellent rating.

“We decided to choose CIAT after doing some value engineering, looking into performance, quality, reliability and safety,” said Shaun Lamming, Head of Operations at Dixon Group, the mechanical contractor for the James Paget University Hospital project.

“The James Paget University Hospital modular ward is an outstanding development which has the potential to change the way that the NHS builds hospitals in the future,” said Richard Featherstone, CIAT Sales Engineer. “We are delighted that CIAT was chosen to provide the high-quality, high-efficiency chiller and heat pump solution required for the project.”

CIAT AquaCIAT air-cooled chillers provide an optimal solution for all cooling applications in healthcare facilities, offices, administration and commercial buildings. For more information about the solution delivered to James Paget University Hospital, visit: [www.ciat.com/en/uk/](http://www.ciat.com/en/uk/).

