

St Peter Mancroft Church

OCHSNER Heat Pump Case Study



OCHSNER
HEAT PUMPS



The Church of St. Peter Mancroft is the largest Church in Norwich (aside from its two Cathedrals). Grade I listed, with beautiful architecture dating back to the 15th Century, it boasts such visually impressive features as a 1463 font and a Flemish tapestry dating from 1573.

Summary of Changes

St Peter Mancroft Church in Norwich city centre has transformed its carbon footprint and energy use by replacing its entire interior lighting system, installing heat pumps as well as batteries and solar panels. Through this work, the church expects to see an 84% reduction in emissions by saving 60 tonnes of CO₂ each year. St Peter Mancroft is now recognised by The Church of England as a Demonstrator Church as an example for all churches striving to meet the CofE's Net Zero 2030 ambition.

The church has made the switch to renewable heating with the installation of two OCHSNER Air 41 heat pumps. This forward-thinking project ensures the church is gently and consistently heated throughout the winter months, an essential approach to preserving the fabric and structure of such an important heritage building. The ultra-efficient technology of the Air 41, combined with its record-breaking low sound levels, made it the only suitable choice for such a prestigious and acoustically sensitive site. By integrating the heat pumps with other renewable technologies, the church not only dramatically reduces its carbon footprint but sets an inspiring example of how sacred spaces and listed properties can embrace sustainable solutions to protect their legacy for future generations.

For more information regarding OCHSNER heat pumps contact our England and Wales team below.

sales@warmetek.co.uk www.warmetek.co.uk

CHSNER
HEAT PUMPS



The AIR 41 - Heating and Cooling

Indoor unit: 1289 x 600 x 680 [mm]

Outdoor unit: 1104 x 2224 x 965 [mm]

Flow temperature max: 65 [°C]

Possible building heat load: 23-38 [kW]

SCOP: 3.83

Energy efficiency class: A++



The OCHSNER Heating Solution

The success of a decarbonisation project like the one at St Peter Mancroft Church on selecting the right technology. The OCHSNER AIR 41 air source heat pump was chosen specifically for its unique combination of features.

Reverent Silence for a Place of Worship

The core of the spiritual experience is peace. The OCHSNER AIR 41's signature split system design was paramount for St Peter Mancroft. By locating the compressor indoors within sound proof housing, the two external units operate almost silently. This ensures that services, concerts, and moments of private prayer are never disturbed by mechanical noise, preserving the serene and holy atmosphere of the church.

Invisible Integration with Historic Architecture

Working with historic and listed buildings presents unique challenges, as planning regulations rightly demand minimal aesthetic and structural impact. The AIR 41 is perfectly designed for these scenarios.

A building of this significance cannot be altered by visually intrusive modern equipment. The AIR 41 system was designed for discretion. The lightweight and compact outdoor units of the two AIR 41s were placed carefully to have zero impact on the historic sightlines of the church's exterior. The system delivers powerful heating while remaining effectively invisible, a critical requirement for any Grade I listed building.

Gentle Warmth to Preserve Ancient Fabric

Harsh, dry heat from traditional boilers can cause irreversible damage to ancient wood, stone, and priceless artefacts like the church organ. The OCHSNER heat pumps provide consistent, gentle warmth. This stable and carefully controlled environment prevents damaging fluctuations in temperature and humidity, actively helping to conserve the delicate historic interior for the centuries to come. This protective quality makes it the ideal choice for museums, galleries, and, most importantly, living history like St Peter Mancroft.

Engineered for Decades of Reliability

A key consideration for a large-scale investment is the longevity of the equipment. OCHSNER heat pumps have been around since 1978 and are renowned for their robust Austrian engineering and are built with top components including a stainless steel power-coated shell to withstand the elements. The AIR 41 is no exception, with a designed operational lifespan projected to last well over 20-25 years, with some heat pumps installed exceeding 40 years of operation.



At the forefront of innovation since 1978, Ochsner heat pumps are engineered with cutting-edge technology to surpass the highest performance and environmental benchmarks. Each Ochsner system is a testament to our commitment to harnessing natural resources with exceptional efficiency to minimise the ecological footprint of your home. Our dedication to a sustainable future is matched by our pursuit of designing whisper-quiet heat pumps that preserve the peace and quiet of your living environment.

By choosing Ochsner, you are not just selecting a superior heating and cooling system; you are embracing a philosophy of environmental stewardship and technological leadership. Experience the Ochsner difference: where innovation, efficiency, and silence converge.



Available in England & Wales
www.warmetek.co.uk