

Case Study

CHANGE IS IN THE AIR

INGENIOUS AIR



Key Benefits

- ✓ Heating, cooling & air purification in one system.
- ✓ No uncomfortable air conditioning draughts.
- ✓ High specification air purification module reduces spread of airborne infection.
- ✓ Discreet air outlets maximise available space in each room.

Protecting Patients by Reducing Airborne Infection

The Problem:

The doctors at St John's Villa surgery in London needed a new heating and cooling system for their refurbished practice. They wanted to improve the indoor air quality and treat patients in a comfortable and draught-free environment. Many of their patients are unwell - some actively infectious and others at risk of picking up an infection. It was therefore essential to reduce the risk of transmission of airborne infection. In addition, there could be no hot surfaces as some patients are frail and at risk of injury.

The Solution:

The architect recommended two Ingenious Air® Small Duct Systems. Each was paired with a 14kW high-efficiency reverse cycle electric heat pump and the high specification air purification module. The air purification module uses three technologies - high-level filtration, photo-catalytic oxidation and ultraviolet lamps. These neutralise all three types of serious indoor air pollutant, which can lead to short and long-term ill-health:

1. Airborne bacteria and viruses (0.001 microns) that cause infectious illnesses. These include influenza, colds, tuberculosis, chickenpox and c.difficile.
2. Airborne particulates that cause allergies. These include pollen, fungal spores, dust mites, pet dander and tobacco smoke.
3. Airborne toxic volatile organic compounds (VOCs) that can cause short and long-term ill-health. These include nitrous oxide, carbon monoxide and unpleasant odours.

Seven-day timer controls provide maximum comfort by allowing the systems to be programmed to match requirements.

Follow Up:

Air purification helps control the spread of airborne infections. There are no hot surfaces during heating and no cold draughts during cooling. Positioning the discreet air outlets in the ceiling, wall and floors maximises space in each room. Heating and cooling is delivered evenly and comfortably. There are no air conditioning draughts. Routine planned maintenance maintains effectiveness and efficiency.

"The air purification helps control the spread of infection and protect our patients when they visit our surgery. Each room is comfortable and there are no cold draughts when the air conditioning is on. Air outlets in the ceiling, wall and floor mean there are no radiators, which has given us more space in each room".

DOCTOR, ST JOHN'S VILLA SURGERY