

# Case Study

CHANGE IS IN THE AIR



## Key Benefits

- ✓ Meets or exceeds strict ISO 7 cleanroom criteria.
- ✓ Cooling, heating & high specification air purification in one system.
- ✓ Flexible design allowed easier installation into a tight space.
- ✓ Parts requiring routine maintenance are outside of the laboratories, reducing disruption.

## Meeting Cleanroom Standards in Two IVF Laboratories

### The Problem

The London Women's Clinic in prestigious Harley Street provides pioneering fertility treatment to help patients have a healthy baby. The clinic needed air conditioning, heating and air purification for two state-of-the-art egg collection and implantation laboratories. These stringent ISO 7 cleanroom standards had to be met to correctly control the environment:

- |  |          |
|--|----------|
| 1. Even temperature control:                             | +/- 1°C  |
| 2. Low relative humidity:                                | 25 – 40% |
| 3. Air changes through air purification module per hour: | 20       |

In addition, limited space and low ceiling height made installation potentially difficult in this striking, listed building.

### The Solution

One 14kW Ingenious Air (Small Duct) System was installed in each laboratory. The air handling units (AHUs) were located out of the way in a cupboard. This allowed maintenance work to be carried out without disruption to the clients or the business. Flexible ducting and multiple choices for positioning the AHU, cooling coil and air purification module made installation straightforward. Each laboratory required a different configuration to fit.

Discreet, white air outlets were positioned in the ceiling to keep temperatures even, comfortable and draught-free.

### Follow Up

The clinic carries out independent monitoring and all ISO 7 requirements are achieved or surpassed. This third-party validation shows that temperature control is within +/- 0.5°C and 36 air changes are achieved per hour. The high specification purification cleans the air and removes bacteria, viruses, pollutants, dust and allergens. Each laboratory provides the required controlled environment for treatments to be most effective.