## CASE STUDY

## FRESH AIR PACKAGE



Air Options are able to offer a wide range of ventilation / fresh air and extraction systems and recommend as part of our installations that mechanical ventilation is considered where budget allows as opposed to the use of openable windows.

Whilst opening windows does allow for airflow into into an office space, this air is essentially unmeasured / unfiltered as well as often leading to increased load on heating and cooling systems.

We therefore recommended the use of Heat Recovery Ventilation the packages supplied and installed consisting of "all in one" packaged units offering the following benefits:

- Measured Fresh Air Input.
- Filtered Fresh Air.
- Pre-Conditioned Input Air.
- Measured Extract Air.
- High Air Exchange Rates.
- Quiet In Operation.
- Can Be Interlinked To Heating / Cooling Controls.
- "Free Cooling" Facility.
- · Allows both "positive" or "negative" air pressures.
- Removal of stale Air.

The system installed was Samsungs ERV Air to Air Heat Exchanges, which consists of a single packaged unit having all fans / filters and heat exchanger integral, allowing for either free standing or concealed within ceiling voids.

The unit was in this instance installed in an "exposed" manor, with the unit located at high level, wall mounted. Both supply and extract ducts pass through the external wall via 300mm Dia builders works holes fitted with external weather louvres. Internally the ductwork does have the facility to be extended however in this instance this was left locally finished to allow for the airflow to be locally dispersed into the space. we did however install opposing ducts to minimise any possible airflow recircualtion.

The ERV / HRV solution also has the ability to work in conjunction with the heating and cooling having the option for a bypass "free cooling" function that allows for direct input of external air where cooling is needed and ambient air is cooler that internal,

The client now has a very energy efficient solution with this being quiet in operation as well as ensuring excellent air quality levels.

These systems are available from most manufacturers and we are also able to supply and install direct fresh air packages / extraction packages where areas need high airflow exchanges.

Building:	Shell and Core
Location:	Essex
Manufacturer:	Samsung
Heating & Cooling:	YES
Ventilation:	Heat Recovery Meeting Building Control Requirements
Appointment Objectives:	Design & Installation
Energy Savings :	Expected Upto 25%
Timescale:	2 Weeks

## **Head Office**

Environment House, Black Croft Road, Witham, Essex, CM8 3YN

## London Office

9 Devonshire Square, City of London, EC2M 4YF



0800 0188423



enquiries@airoptions.co.uk



www.airoptions.co.uk

