Case Study

Garfield House, Edgware Road Making a World of Difference



New contemporary London venue uses heat recovery to maximise comfort

A new central London meeting and conference venue that opened its doors in January is using state-of-the-art heat recovery air conditioning and ventilation to deliver absolute comfort for guests.

Garfield House on the bustling Edgware Road has seen its three floors undergo a total transformation into contemporary meeting and conference rooms for businesses to hire.



Air Conditioning | Heating Ventilation | Controls

#### **Case Study**

Garfield House, Edgware Road Making a World of Difference



ABOVE: Garfield House is the latest distinct, modern offering from etc Venues.

BELOW: All of the building services are on show including this Lossnay heat recovery ventilation unit.



There are 22 separate meeting spaces of varying sizes spread across the three levels plus breakout and coffee areas. They have all been given a thoroughly modern overhaul and, in keeping with the theme, the air conditioning services are all on show, with ductwork runs and vents all part of the look and feel of the latest offering from venue hire company, etc Venues.

Specialist installer and Mitsubishi Electric Business Solutions Partner, Cool Systems Holdings was called upon to deliver on the contemporary brief that required the creation of not only a comfortable environment for users but a system that was also a part of the ambience of the venue, which can host anything from large-scale events to training days and seminars.

CS Group Technical Design Engineer Martin Lazovy explains: "There was nothing on the third floor when we started and only a couple of split systems on the first and second. We stripped everything out and started from an empty building.

"The brief was to ensure all services were exposed in line with the contemporary design the client was going for, which meant using exposed ducted fan coil units on the ceilings on each of the floors."

CS supplied Mitsubishi Electric Lossnay mechanical ventilation with heat recovery (MVHR) units to each floor as well as a City Multi R2 heat recovery air conditioning system. The building's server rooms, pantry and kitchen spaces were serviced with smaller split air conditioning units.

Developed and refined over the past 30 years, the Lossnay system has perfected the recovery of waste energy whilst delivering fresh air ventilation within any building.

#### **Case Study**

Garfield House, Edgware Road Making a World of Difference



ABOVE: The VRF air conditioning and the Lossnay heat recovery ventilation are controlled with an AG150 centralised controller.

BELOW: The entire building is now benefiting from modern, energy efficient air conditioning, including the kitchens, where the specially designed stainless steel indoor unit is used.



Especially important in schools and offices, Lossnay can work in conjunction with Mitsubishi Electric air conditioning to maintain a comfortable and fresh environment.

The units reduce overall energy costs by extracting stale air and then recovering the heating or cooling energy to either warm or cool incoming fresh air.

#### By utilising this energy, the Lossnay system can save up to 30 per cent on initial capital costs of heating and cooling plant.

A total of 21 Lossnay units varying from the LGH-50RX5-E to the larger LGH-100RX5-E have been deployed at Garfield House. This commercially orientated system can be utilised virtually anywhere to extract stale air and then recover the heating or cooling energy to either warm or cool incoming fresh air.

The heat recovery air conditioning is delivered by two R410A City Multi units. Many buildings require cooling in some areas and heating in others even in adjacent rooms.

The outstanding City Multi R2 system meets this requirement by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings of up to 30 per cent over conventional systems.

The system installed at Garfield House all feeds into Mitsubishi Electric's advanced AG150 centralised controller, which can also interlock with the Lossnay ventilation system.

The AG150 is a very cost effective 9 inch touch screen centralised controller. The panel can control up to 50 devices, with the functionality to monitor energy use, set daily timers and instigate night setback. In addition, set point upper and lower limits can be established and refrigerant volumes can be checked via the interface.



#### **Installation Summary**

Installation date: January 2015

Location: Edgware Road, London

Equipment:

3 x large City Multi R2 condensors

35 x PEFYP-VMAE ducted indoor units

21 x Lossnay LGH RX5 units

1 x Stainless steel kitchen unit

1 x AG150 centralised controller



Garfield House, Edgware Road Making a World of Difference

Remote control is also provided by standard PAR31 MAA panels throughout the building's various rooms. The clear backlit display and simple functions of daily and weekly timer control make for a very simple user interface. Remote PAC-SE41TS sensors have also been installed in areas with no remote controller.

The entire installation is also primed to be linked up to Mitsubishi Electric's forthcoming Remote Management Interface (RMI) that will enable monitoring and control from iPhone and other smart devices.

### "The client is extremely happy with the end result," says Martin. "The system works well and fits in with the design values of the building.

"We are a Business Solutions Partner of Mitsubishi Electric, and have installed their equipment in several jobs previous to this. As well as being easy to install, it is reliable, efficient and delivers the level of performance these clients demand, so we wouldn't use anything else."

www.csgroup.co.uk





Telephone: 01707 282880 email: airconditioning@meuk.mee.com web: www.livingenvironmentalsystems.mitsubishielectric.co.uk

UNITED KINGDOM Mitsubishi Electric Europe Living Environmental Systems Division Travellers Lane, Hatfield, Hertfordshire, AL10 8XB, England General Enquiries Telephone: 01707 282880 Fax: 01707 278881 IRELAND Mitsubishi Electric Europe Westgate Business Park, Ballymount, Dublin 24, Ireland Telephone: Dublin (01) 419 8800 Fax: Dublin (01) 419 8890 International code: (003531)

Country of origin: United Kingdom – Japan – Thaland – Malaysia. GMIsubible Electric Europe 2015. Mitsubible ind Misubible Electric are trademarks of Mitsubible Electric Europe B.V. The company reserves the right to make any variation in technical specification to the equipment described, or to withdraw or replace products without prior rollication or public announcement. Misubible Electric is constantly developing and improving its products. All descriptoms, liustations, diversings and specifications in this publication present only general particulars and shall not form part of any contract. All goods are supplied subject to the Company's General Conditions of Sala, a copy of which is available on request. Third-party product and transf manifes or registred trademarks of their respective owners.





