

CASE STUDY

HITACHI AIR CONDITIONING INSTALLATION



Air Options was approached to offer costs for the supply and installation of a HVAC installation within a bare shell and core for a new residential development sales office.

We reviewed the scope and attended site to inspect the area revising and finalising the original brief which has several design limitations.

Initially the biggest site constraint was no space or allocated area externally which a traditional air sourced heat pump would be installed, so this scheme had to use a specialist Heating / Cooling unit as manufactured by Hitachi designed for internal fitment.

This offered a greater challenge needing additional design works to integrate the ducted outdoor unit into the layout, along with a separate Heat Recovery Ventilation unit needed to provide fresh air and stale air removal. Ductwork co-ordination and design was critical on this project to ensure all services could be installed and in-line with manufactures guidelines.

The type of building did benefit from having pre-fitted louvres with the upper glazing positions, these are normally in-filled, that we opened up to connect the various supply and return ductwork too.

Internally the Heat Recovery Ventilation Unit and Ducted Condensing unit all needed to be located within a tight plant area which was co-ordinated and designed to allow for correct duct orientations as well as consideration for future serviceability.

The Ducted Condensing Unit was connected internally to various 4-way cassettes and ducted type units, sized and spaced according the the area requirements, with the ducted units connecting to discrete linear type grilles offering an excellent high quality finish.

Once all the systems where installed these where tested / commissioned and balanced by Air Options engineers.

The client now benefits from having a full HVAC scheme down to great engineering and system selections / co-ordiantion in a site with several difficult constraints.

Building:	Shell and Core
Location:	London
Manufacturer:	Hitachi
Heating & Cooling:	YES
Refrigerant:	R410a
Objectives:	Design / Install
Engineering Achievements:	No External Plant / Compact Plant Area
Ventilation:	Yes

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No matter how large or small your project may be,
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