



air cool engineering systems ltd

Aneurin House, Astonbury Farm
Aston, Herts SG2 7EG
T: 01438 880326 F: 01438 880019
E: sales@aircool-systems.co.uk
W: www.aircool-systems.com

25th October 2023

Ref: SY4454/KM/wb

St Peter's Church,
St Peter's Community Hall,
The Willows,
Broadwater,
Stevenage,
Herts SG2 8AN

For the attention of Mr John Hollands

Dear John,

Re: St Peter's Church, Air Conditioning

Further to mine and Carl's visits to the church we forward our detailed quotation for the supply and installation of air conditioning to the Main Church Hall.

As discussed all systems proposed are Heat Pumps, so as to provide replacement technology for the very old gas fired boilers, and the most economical way of undertaking these works is to install wall mounted units below the high level windows blowing out into the room.

The heat load calculation for this area equates to 25 kw, so to undertake this without being too intrusive we have selected three number units.

A twin system, i.e. two indoor units connected to one outdoor, down the internal flank wall and a single wall mounted unit down the front wall.

The external units would be sited, the twin unit on the rear and the single unit on the flat boiler roof.

Where the band and alter is, to undertake this are we recommend two off small units blowing out to the centre. One outdoor unit mounted on the boiler roof, and the other externally around the back of the hall.

Equipment Selection

Main Hall:

- 2 off – FAA71B Wall Mounted Heat Pumps, Indoor
- 1 off – RZAG140 External Heat Pump Condenser



Heating Capacity: 15.25 kw
Cooling Capacity: 14.0 kw

1 off – FAA100B Wall Mounted Heat Pump, Indoor
1 off – RZAG100 External Heat Pump
Heating Capacity: 11.0 kw
Cooling Capacity: 10.0 kw

Altar Area

2 off – FFA60 Ceiling Suspended Fan Coils
2 off – RXM60 External Heat Pumps
Heating Capacity: 12.0 kw
Cooling Capacity: 10.4 kw

Mains Power Requirement - By others.

To external units only:

RZAG140	415V, 3 Phase + Neutral	16 amps
RZAG100	415V, 3 Phase + Neutral	16 amps
RXM60	230V, 1 Phase + Neutral	16 amps

All complete with weatherproof isolators to which we will wire from.

Associated Builder's Works

We have allowed for a simple concrete base for the 140 unit to go on.
The two units on the boiler house roof will be mounted on plyrock feet.
The remaining small unit will be mounted on cantilever feet.

Hi Level DeStrat Fans

As mentioned previously we strongly recommend the installation of the Airius De Strat Fans so as to reduce ceiling heights, (where most of your warm air will raise to) and make the heat pumps more efficient.

We can only assess these as and when you are undertaking the insulation installation, so as to see if the roof can support the weights of the fans, and then access running the electrical redials to them.

As mentioned we have spoken to the manufactures and they have recommended three number for this area. Please budget for £7.5k for these works.



Air Conditioning		£21,865.00
Builder's Works		£ 960.00
Destrat Fan	p.c. sum	£ 7,500.00

Please note as this is Heat Pump technology this will exclude VAT, yet remaining works will.

Exclusions

- 1) Mains Electrics.
- 2) Planning or local authority approval or fees.
- 3) Structural calculations or design.
- 4) Specialist acoustics.
- 5) Builders works.
- 6) MCD, VAT, LAD. P.I.
- 7) Out of hours works.
- 8) Uninterrupted works in normal working hours.
- 9) Anything not mentioned or detailed.
- 10) SBEM Calculations/ EPC Certificate /Building Log Book/ Building Air Pressure Test, BREEAM.
- 11) Crane Hire, Specialist Delivery.
- 12) Any amenities costs, Gas Water, Electricity, BT etc.
- 13) Service & Maintenance.
- 14) All in accordance with an agreed programme.
- 15) Refrigerant Detection.
- 16) Fire Alarm Interface.
- 17) Fire Stopping, Collars, Sleeving.
- 18) Condenser Base or Steelworks.

This quotation is valid for 30 days

Payment

25% with written order and remainder on completion of works.

We trust we have interpreted your requirements correctly and await your further instructions.

Yours faithfully,

On behalf of *air cool engineering systems ltd*


Kevin McLeod
Director