

Manufacturers of Bespoke Air Handling Units and Associated Equipment for Air Conditioning Applications

# Ventilation Equipment Limited

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## EMAIL TRANSMISSION

Attention of: Mr Ganesh Lingham
Email address: Ganesh.Lingam@atkinsglobal.com
No of pages: 10

#### PROJECT: JUDD STREET - KELVIN HOUSE - OUR REF: Q 6879 / 07 / GP / REV 1

We thank you for your recent enquiry and take pleasure in submitting our quotation for the Air Handling Units required on the above project. A summary of our prices follow with individual data sheets and sketches attached.

The prices quoted will remain open for acceptance for 4 weeks and subject to our standard terms and conditions of sale.

PRICIN	IG SCHEDULE:				
Unit	Description	Model	Cost	Qty	Total
001	AHU 1	L 2060 sp	£ 8,569	1	£ 8,569
002	AHU 2	L 2040 sp	£ 7,410	1	£ 7,410
				Total	£ 15,979
ADDIT	IONAL COSTS:		· ·		
Cost of	delivery to London				Included
Matching DX condensing units (installation, pipework, wiring, valves and commissioning by others)					£ 3,784

## CONSTRUCTION/SPECIFICATION NOTES + DETAILS OF INCLUSIONS AND EXCLUSIONS

- □Unit manufactured to our standard construction specification, with our standard materials, door furniture and finish.
- Delivery cost quoted above at Monday to Friday rate.
- □Delivery cost quoted above assumes all goods supplied in one shipment.
- ☐Standard delivery vehicle 40-foot trailer.
- □Off loading & final positioning by others.
- □ Maximum of 2 hours standing / offloading included per vehicle
- □Current delivery period 6 weeks from drawing approval (up to date period should be confirmed at time of order placement).
- □ See the attached additional information page for specification, inclusions and exclusions.
- □NOTE The design of the inter-connecting pipework, positioning of valves etc between the condensing unit and AHU cooling coil is the responsibility of the contractor and is excluded from this tender.
- ☐ Technical data sheets attached are for quotation only. Details are subject to revision when final selections are made for procurement of suppliers.

## Regards

Commercial Contact - Brett Wilson

Tel: 01293 521201

E-mail: brett.wilson@myventiltaion.co.uk



### ADDITIONAL INFORMATION

- Unit framework will be assembled from extruded aluminium section, which will have a plain finish.
- Panels will be double skinned with 50 mm of high density insulation sandwiched between an inner skin formed
  from galvanised steel and an outer skin formed from pre-painted steel. Our standard colour is Grey C26 Magona.
- 3. The casing complies with Eurovent regulations having the following:

	Casing Strength – 2A
	Thermal Transmittance - Class T
	Thermal Bridge – TB3
П	Air leakage – Class A

- 4. Fan motors will be pre-wired to externally isolators.
- 5. Vee belts will be protected by a wire mesh door guard.
- 6. All access doors will be hinged/lift off.
- 7. Fan casings will be formed from galvanised steel and remain unpainted.
- 8. Filters will be supplied suitable for either front or side withdrawal and fitted with inclined gauge manometers.
- Cooling coils will be constructed from copper tubes with aluminium fins. In addition the cooling coil will be fitted
  with polypropylene eliminators to prevent the carryover of moisture.
- 10. The electric heaters will be suitable for either step or thyristor control (controller excluded). The elements will be pre-wired to an externally mounted terminal box.
- 11. The recuperator section will be fitted with face & bypass dampers (suitable for motorisation by others) and a drain tray.
- 12. The unit sections will be mounted on 110mm high base frames.

We have excluded from our tender fitting of all other controls, wiring, trucking, pipework, traps, valves, works and site testing, off-loading, installation and commissioning. Any site work will be carried out during normal working hours only and requires continuity of works and access to all areas at all times. Any item not specifically mentioned in this quotation is excluded.

UNIT REFERENCE: AHU 2

MODEL: L 2040 sp

UNIT TYPE: Horizontal / Internal

NO OFF: One

Components in direction of airflow as follows: -

#### **SUPPLY AIR**

#### HEATER

Type Electric Air on -4.00 Air off 5.00 Design output 11.00 kW

Operation / control Suitable for thyristor

Manual reset cut out Fitted

Electrical supply 415 Volts - 3 Phase - 50 Hertz - 4 wire

## **ACCESS**

## PRE-FILTER

Type Panel Arrangement Flat bank Withdrawal Front Grade G4 Panel Depth 50mm

Manometer Inclined type fitted

## SECONDARY-FILTER

Type Bag Arrangement Flat bank Withdrawal Front Grade F6 Bag Depth 535mm

Manometer Inclined type fitted

## RECUPERATOR

Type Diagonal flow Supply air on -4.00 Supply air off 9.48 Efficiency 49%

Construction Aluminium fins - Galvanised casing

Face & Bypass dampers Fitted Operation Motorised Motor By others

Drain Tray Type Fixed Galvanised Steel Trap

By others

**COOLING COIL** 

Type Direct Expansion

Air on 26.90 DB - 47.0% RH

Air off 18.00 DB - 81.0% RH

Output 11.00 kW

Medium R407C
Evaporating temperature 10.0°C
No interlaced Circuits 1
No of rows 5

Construction Copper tubes – Aluminium fins

Face velocity
2.38 M/s
Eliminators
Fitted

Drain Tray Type Fixed Galvanised Steel

Trap
Recommended Trap size

By others
230 mm

**HEATER** 

Type Electric
Air on 5.00
Air off 18.00
Design output 16.00 kW

Operation / control Suitable for thyristor

Manual reset cut out Fitted

Electrical supply 415 Volts - 3 Phase - 50 Hertz - 4 wire

**SUPPLY FAN** 

Type Double Inlet Double Width

Impellor Backward Curved

Drive Vee belt
Motor arrangement Single

Motor & drive location Inside Air Stream
Air volume 1.00 m3/s

External resistance 200 Pa
Total resistance 1041 Pa
Fan speed 3750 rpm
Total Efficiency 74 %
Fan absorbed power 1.41 kW
Motor power 2.20 kW

Motor type

T.E.F.C - single speed

Full load current 4.40 amps

Starting current 25.96 amps – D.O.L.

Electrical supply 415 Volts - 3 phase - 50 hertz

Fan size 250mm

Induct sound power levels (fan intake/outlet)

OBF	63	125	250	500	1000	2000	4000	8000
db	83	84	83	85	83	78	73	68
db	83	87	85	86	83	78	73	68

## **RETURN AIR**

### **ACCESS**

#### **FILTER**

Type Panel
Arrangement Flat bank
Withdrawal Front
Grade G4
Panel Depth 50mm

Manometer Inclined type fitted

### RECUPERATOR

Type
As detailed above
Extract air on
20.00 DB - 50.0% WB
Extract air off
8.61 DB - 89.0% WB

### **EXTRACT FAN**

Double Inlet Double Width Type Backward Curved Impellor Vee belt Drive Single Motor arrangement Inside Air Stream Motor & drive location 1.00 m3/s Air volume 200 Pa External resistance 605 Pa Total resistance 3155 rpm Fan speed 70 % Total Efficiency 0.87 kW Fan absorbed power 1.50 kW Motor power T.E.F.C - single speed Motor type 3.20 amps Full load current 17.60 amps – D.O.L. Starting current 415 Volts - 3 phase - 50 hertz Electrical supply

Induct sound power levels (fan intake/outlet)

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OBF	63	125	250	500	1000	2000	4000	8000
db	80	82	<b>8</b> 1	81	81	79	78	68
db	92	93	86	83	81	79	<i>7</i> 8	68

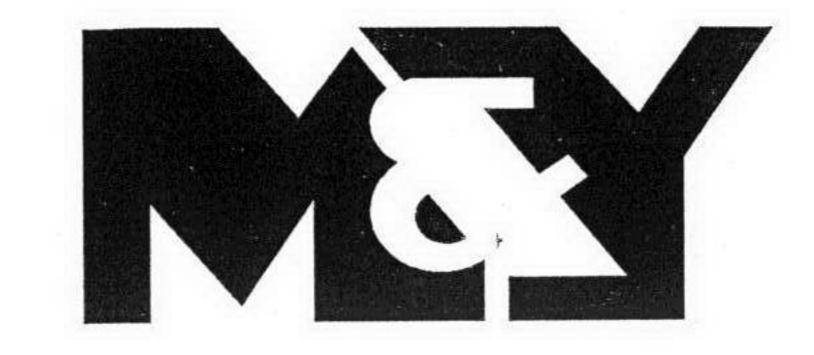
250mm

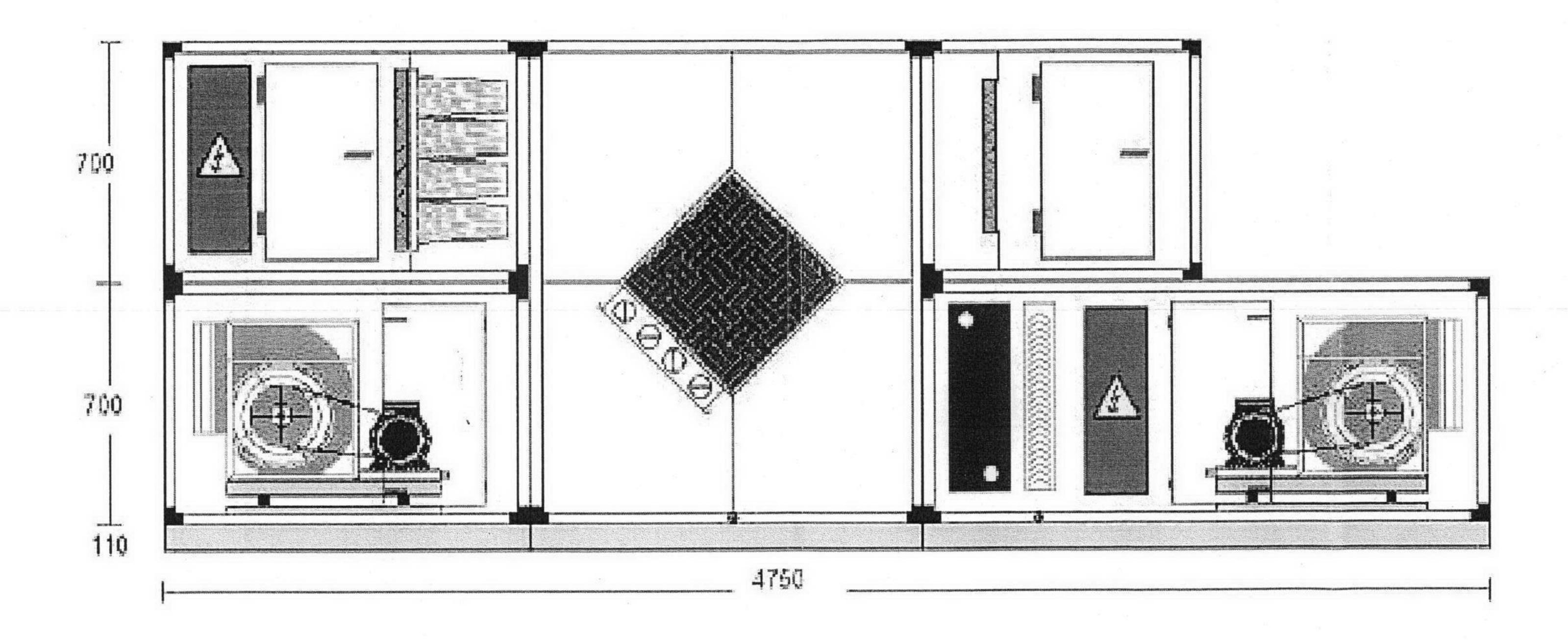
## **UNIT DIMENSIONS**

Fan size

Height
Width
1300 mm
Length
Weight
No of sections
1400 mm plus 110 mm base
1300 mm
4750 mm
4750 mm
FIVE

DELIVERY PERIOD 6 Working weeks from drawing approval.





PROJECT: JUDD STREET - KELVIN HOUSE

UNIT REF: AHU 2 – Rated to handle 1.00 m3/s Supply

UNIT SIZE: 700 / 700 H plus 110mm base x 1300 W x 4750 L