



MARTIN DESIGN ASSOCIATES LIMITED
Building Services Design
&
Energy Consultants

Architecture & Interiors
16 Upper Wimpole Street
London W1G 6LT
FTAO Ms C Zobel

4th April 2012

Our Ref: 09105/PgM/001

Dear Catherine

Re: 94 South Park Hill

Regarding the ventilation to the basement storey at the above property, we can confirm that the provision of meets the requirements of Building Regulations Approved Document F 2006.

A dedicated air handling unit, supplying tempered fresh air and extracting humid air, has been installed by the specialist pool contractor for the swimming pool. This system controls odours and humidity in the pool room. The manufacturers sound power data for the air handling unit, attached, gives a resultant noise level of 31dBA on the atmosphere side of the unit. This would equate to 20dBA in duct at 2m from the unit, which would be the exit from the building.

The remaining habitable rooms in the basement are provided with a continuous mechanical supply and extract system with heat recovery. On low speed (speed 3) the unit provides air volumes to satisfy the requirement for continuous ventilation. On high speed (speed 7) the air volumes achieved satisfy the requirements for purge ventilation. The manufacturer's noise data for the heat recovery fan, attached, shows a noise level of 20.9dBA at 3m from the unit, which would be the approximate level at the exit from the building.

The plant room has passive air make up via ducts from the front light well.

The general arrangement of the system and the ventilation volumes for each area are as shown on our drawing 09105/M/04/A 25.05.11

Yours sincerely

A handwritten signature in black ink, appearing to read 'Peter Milner', with a stylized flourish at the end.

Peter Milner



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Heatstar Project Ref: P20676 7-Dec-2010

Project Title: 94 South Hill Park

System specified : Andromeda FX 1000 Super Plus

Mains Electricity: 3 ph-Neutral-Earth 400v / 50 Hz Protected supply or
1 ph-Neutral-Earth 230v / 50 Hz Protected supply

Supply rating : Three phase: 9 Amps/phase. or
Single phase 22 Amps.

F.L. Running current : Three phase: 4 Amps/phase. or
Single phase 8 Amps.

Protection required : RCD (30mA) / Short circuit (MCB) / local isolator switch.

Other wiring available : Volt free switch contact to request LTHW demand.

Air Flow Rating: Supply/Return Air Flow: 1,500 M³/Hr.
Max. External Res.: 150 Pa

Exhaust/Fresh Air Flow: 150 M³/Hr.
Max. External Res.: 30 Pa

Linear Sound Power <i>Lw dB :</i>	Frequency Hz	Return air	Supply air	Fresh air	Exhaust air
	63	68.3	65.5	26.8	27.6
	125	66.8	64.0	25.9	27.2
	250	67.3	64.5	26.0	27.6
	500	66.0	63.2	25.4	27.2
	1000	65.8	63.0	25.2	27.2
	2000	64.9	62.1	24.9	26.7
	4000	59.3	56.5	22.8	24.3
	8000	49.7	46.9	19.0	20.3

Condensate Water Drain:

Max. rate of flow : 2.7 L/Hr.
Pipe connection : 22 mm PVC / compression
Trapping required : 100 mm Minimum height 'P' trap.

L.T.H.W. Supply: (From Fuel Boiler)

Rated Flow / Rtn temp : (Closed circuit Flow/return) 80 / 60 °C

Supply output rating : 17 kW / 59,000 BTUs

Flow rate required : 0.21 L/Sec @ 7.9 kPa Internal Res.

Pump size for flow : (Or equivalent duty model) UPS 15-60

Connection size / type: 28 mm Copper / Compression

Other requirements : Automatic by-pass valve.

Pool Water Supply:

Connection size / type: 1.5 Inch PVC / Couplers on balanced by-pass.

Flow rate required : 1.5 L/Sec @ 0.4 kPa Internal Res.

Refrigerant Data : 1.3 kG of R407C : Hermetically sealed.

Integra® Plus

Ducted MVHR Unit



Features & Benefits

- Powered heat recovery unit for larger residential or commercial applications
- Up to 70% heat recovery
- Low power consumption
- Effective condensation control
- 3 speed control

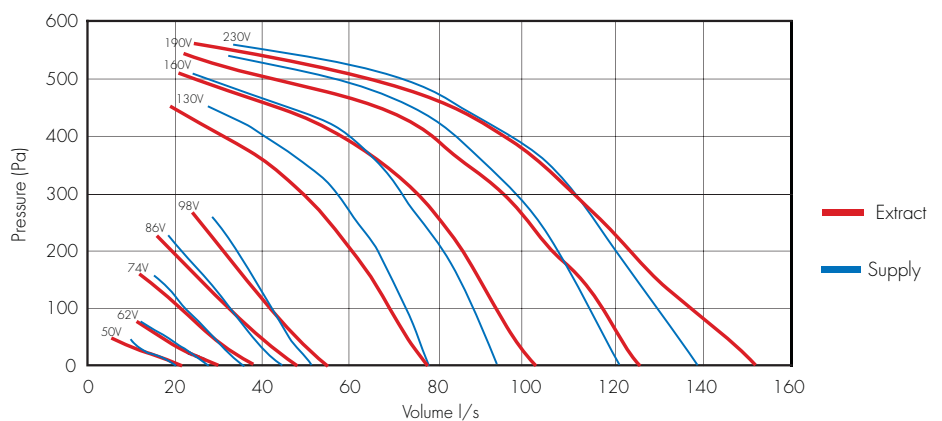
Easy Installation

The Vent-Axia Integra Plus is designed for mounting in ceiling voids, lofts, above a suspended ceiling or vertical wall mounting. Four 150mm spigots are provided for simple connection to insulated flexible or rigid ventilation ducting. The unit comes complete with a 22mm condensate outlet.

Model

Stock Ref
437666

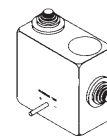
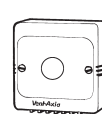
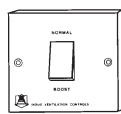
Performance



Units supplied complete with transformer

Motor Speed	1	2	3	4	5	6	7	8	9
Volume l/s (FID)	19.4	29.2	36.1	44.4	50	13.9	91.7	113.9	127.8

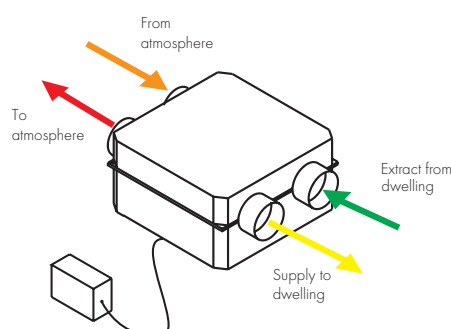
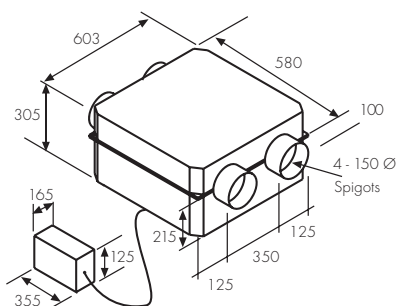
Controllers & Sensors



Trickle Boost Switch	Ambient Response Humidistat	Visionex PIR	TIM2	7 Day TimeSwitch	3 Position Switch
455213	563550A	459623A	370346	563515	5108454

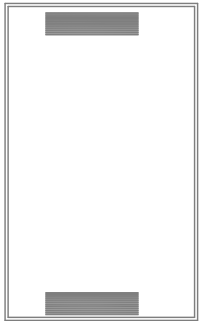
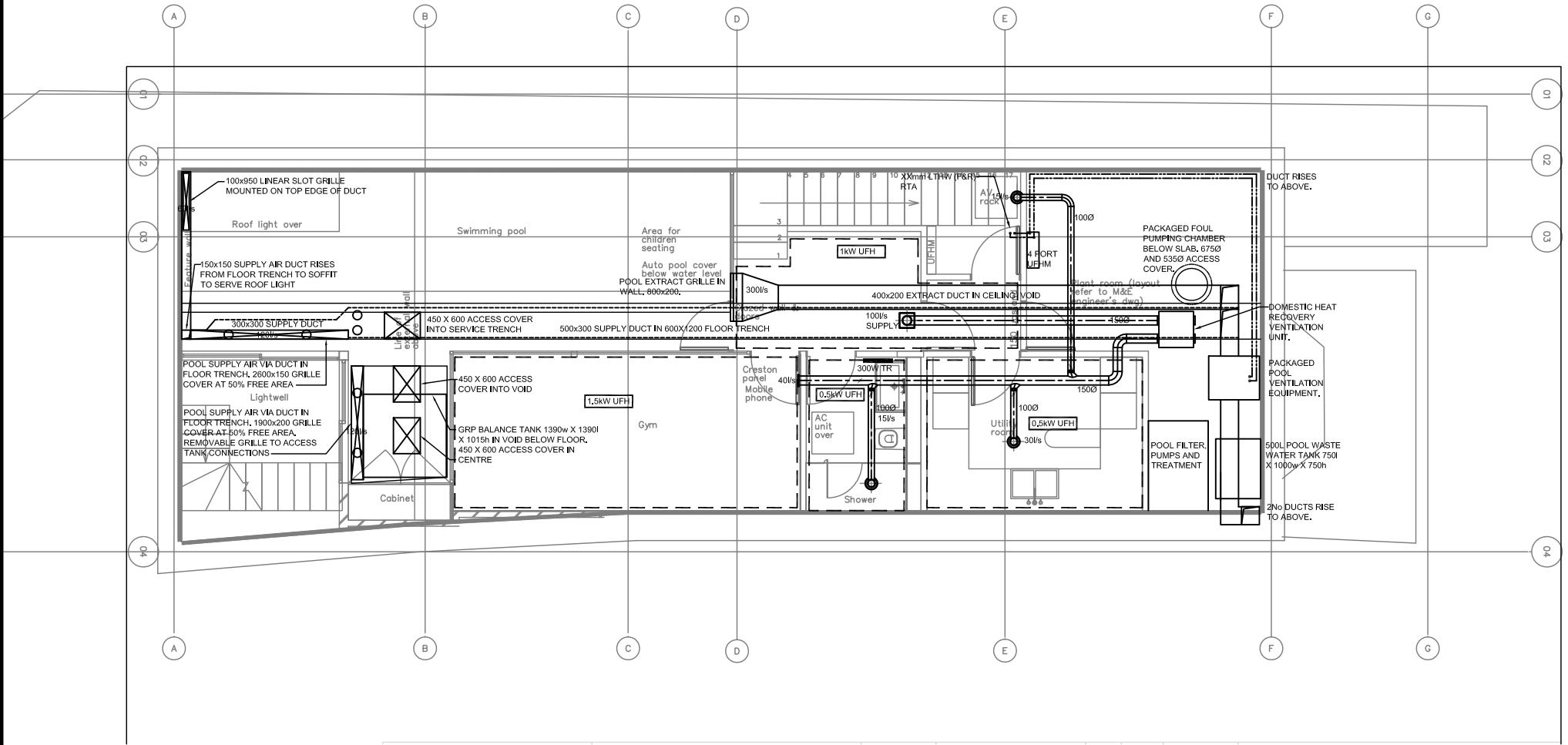
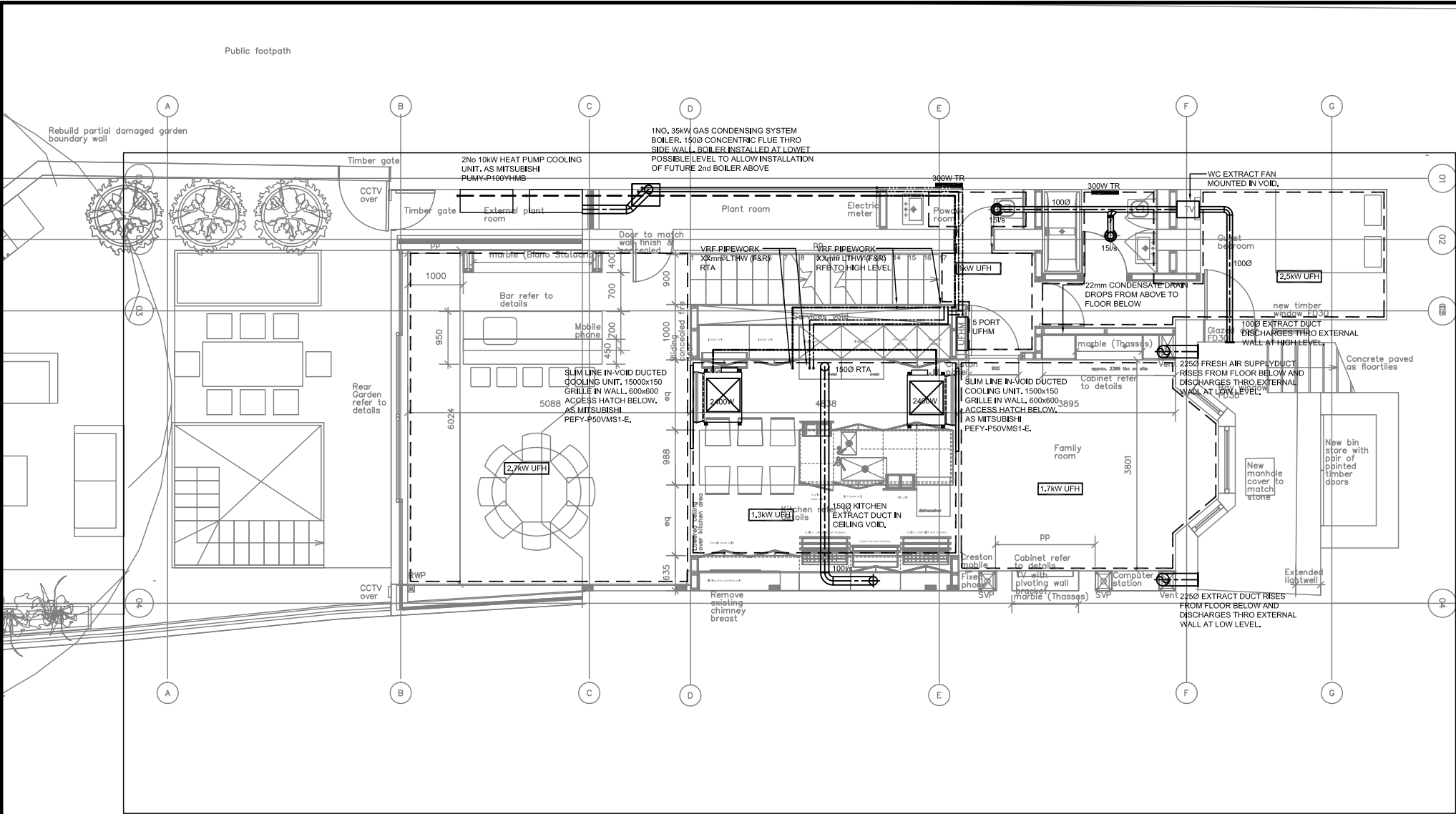
Dimensions (mm)

Weight : 15.5kg fan box, 5kg controller



Power Consumption and noise level

			dB(A) @ 3m
Speed 1	30W	50V	19.2
Speed 2	45W	62V	19.5
Speed 3	66W	74V	20.9
Speed 4	85W	86V	21.9
Speed 5	115W	98V	24.5
Speed 6	188W	130V	30.8
Speed 7	262W	160V	34.3
Speed 8	330W	190V	36.9
Speed 9	425W	230V	39.2



REV.	DATE	AMENDMENT	BY
-	27.04.10	NEW DRAWING SHOWING HEATING, COOLING AND VENTILATION SERVICES PREVIOUSLY ON M01. SERVICES REVISED TO SUIT REDUCED BASEMENT SIZE. POOL PLANT OMITTED. VENT ADDED TO BASEMENT. VRF UNITS AND GRILLES REVISED. CONDENSATE DRAINS ADDED.	PgM
A	25.05.11	POOL SCHEME REINTRODUCED. SEPARATE VENTILATION ADDED TO SERVE GYM, SHOWER, UTILITY AND MEDIA.	PgM

MARTIN

mda

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CLIENT

CATHERINE LEE

PROJECT

94 SOUTH HILL PARK
HAMPSTEAD, LONDON

TITLE

MECHANICAL SERVICES
HEATING, COOLING AND VENTILATION
BASEMENT & LOWER GROUND

MARTIN DESIGN ASSOCIATES
THIS DRAWING IS CONFIDENTIAL AND MAY NOT BE USED, COPIED OR DISCLOSED TO ANYONE WITHOUT PERMISSION OF MARTIN DESIGN ASSOCIATES.

DO NOT SCALE OFF THIS DRAWING

NOTES:

STATUS

TENDER

SCALE: 1:50 @ A1

DATE: Nov '09

DRAWN: PgM

ENGINEER: PgM

CHECKED:

APPROVED:

09105

M

04

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