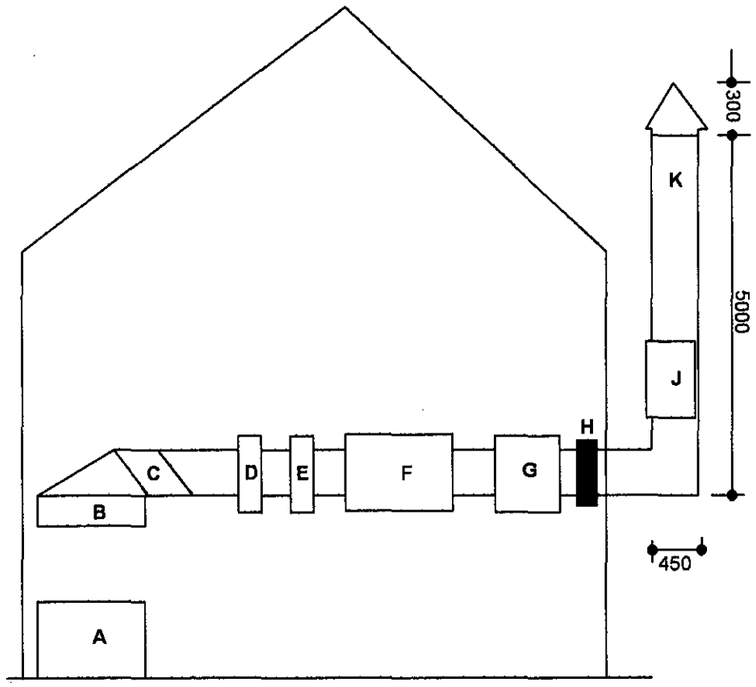
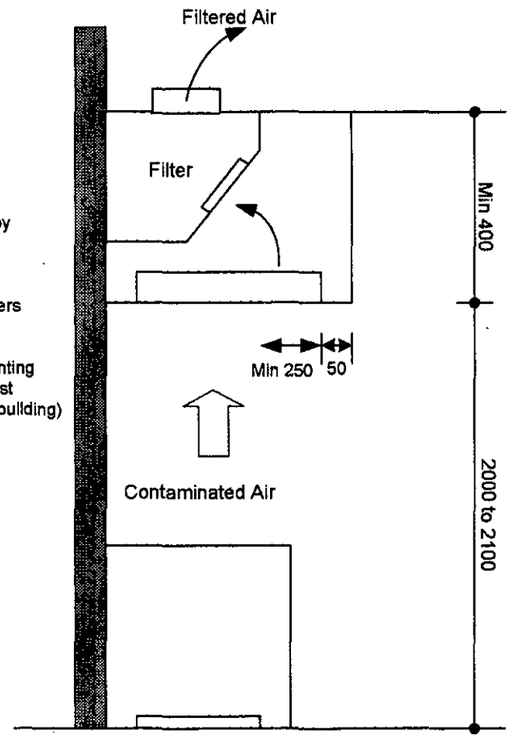


Typical Schematic diagram of Kitchen Extraction Unit
(Not to scale)
Manf. Drawing will supercede this diagram

KEY TO GIGURE

A. Cooking area
B. Cooker hood / canopy
C. Grease filter
D. Coarse filters
E. Fine pre-filter
F. Activated carbon Filters
G. Fan / Motor unit
H. Lagging
I. Anti – vibration mounting
J. Noise attenuator (best located within the building)
K. exhaust flue /stack



Canopy Dimensions
Not to scale

PLANNING AND BUILDING CONTROL
09 JUL 2013

Duct Mounted Kitchen Hood Extract

1.1. General
A. Provide a duct mounted kitchen hood extract fan unit to meet the performance and configuration as indicated in the schedule and detail drawings. The duct mounted kitchen hood extract fan unit shall conform to AMCA standard 211 and 311. The unit shall be of the Centrifume duct mounted kitchen hood extract fan type as manufactured by VES Andover Ltd a company accredited with BS EN ISO 9001:2008.

1.2. Unit Construction
A. The unit shall be provided pre-assembled comprising of a rigidly constructed single skinned galvanised sheet steel case, centrifugal backward curved fan without scroll, and belt driven motor mounted out of air stream.
B. The case shall include two removable access panels located perpendicular to the motor mounting panel. The access panels shall be of sufficient size to permit easy access to all interior components.
C. The unit shall be supplied as standard with a belt drive guard for safety and belt protection.
D. The unit shall be provided with an optional grease collection tray where horizontal orientation is indicated in the schedule and detail drawings.
E. The unit casework shall incorporate high quality leak resistant gaskets on service doors and panels.
F. The standard casework shall be available with optional external reinforced acoustic cladding for noise reduction & thermal insulation.
G. The unit shall be provided with an optional weather lid for motor & drive protection where specified in the schedule and detail drawings.
H. Weatherproof units shall be mounted within a sealed single skinned case, incorporating acoustic foam lining as standard. The unit shall be fully vibration isolated from the weatherproof casework via AV mounting and internal flex flange spigot connections. Access shall be via a removable weatherproof lid.
I. The weatherproof case shall be finished as standard Signal Grey to RAL7004. Colour to be in accordance with schedule.

1.3. Fan
A. The fan impeller shall be centrifugal backward curved, constructed of aluminum and shall include a wheel cone carefully matched to the inlet eye for precise running tolerances. The impeller shall be statically and dynamically balanced to AMCA Standard 204-05, and be tested to ANSI/AMCA Standard 210-99 and AMCA Standard 300-96
B. The unit shall be available with a High Pressure alternative impeller where the schedule specifies duty points beyond the capabilities of the standard impeller.

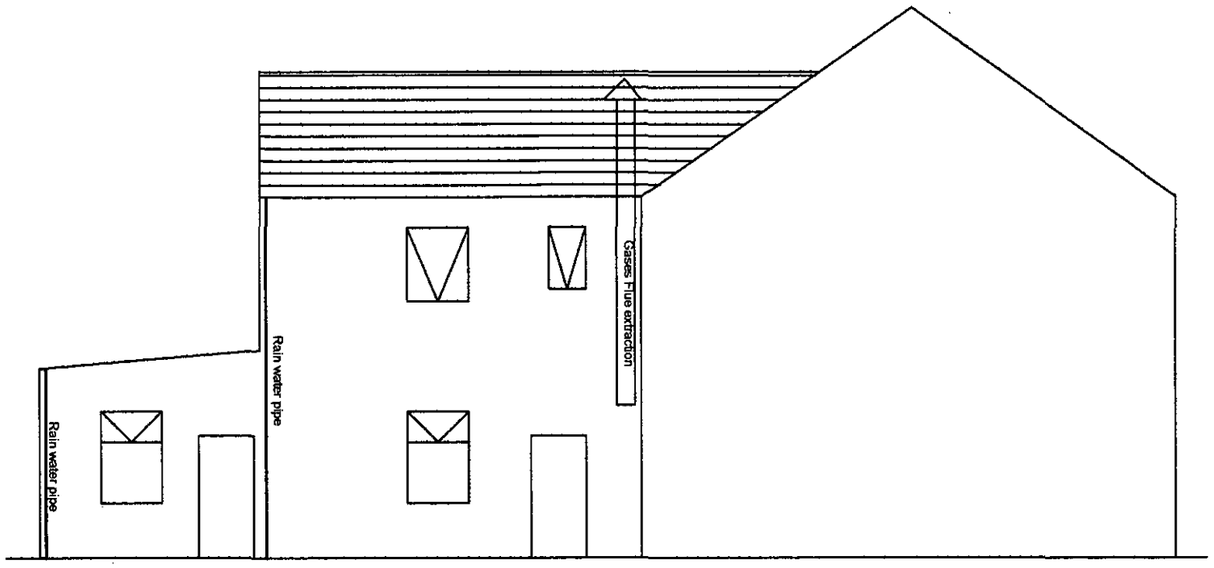
1.4. Motor
A. The motor shall be heavy-duty ball bearing type carefully matched to the fan load and supplied at the specified voltage, phase, and enclosure as indicated in the schedule and detail drawings.
B. Motors shall be readily accessible for maintenance.

1.5. Drives
A. Motors and drives shall be mounted out of the air stream and be suitable for servicing without disturbing the duct mounted housing.
B. Precision ground and polished fan shafts shall be mounted in permanently sealed, lubricated pillow block ball bearings.
C. Bearings shall be selected for a minimum L10 life in excess of 100,000 hours (L50 average life in excess of 500,000 hours) at maximum cataloged operating speed.
D. Drives shall be sized for a minimum of 150 percent of driven power.
E. Pulleys shall be of the fully machined cast iron type, keyed and securely attached to the wheel and motor shafts.
F. Motor pulleys shall be adjustable for final system balancing.

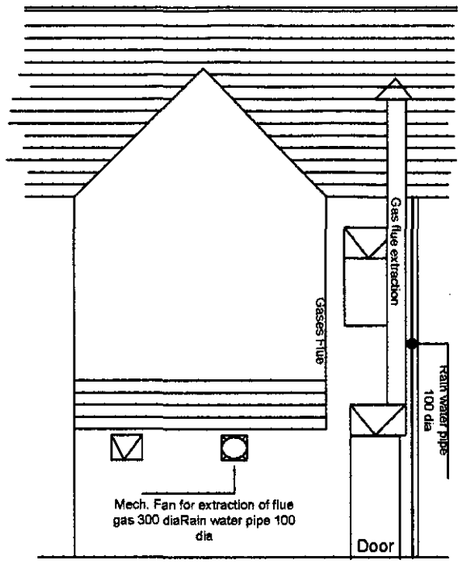
1.6. Operation Environment
A. The unit shall be designed to operate in ambient temperatures from 0°C up to 90°C, and can run continuously at up to 100% humidity level.

1.7. Controls
A. The units shall be fully compatible with inverter speed control for single and three phase motors. **B.** VES supplied inverters shall be provided with a pre-programmed remote fan speed controller.
C. The unit shall be fully compatible with two speed controllers for three phase two speed motors.
D. The unit shall be available with an optional pre-wired motor isolator. The isolator shall be externally mounted as indicated in the schedule and detail drawings.

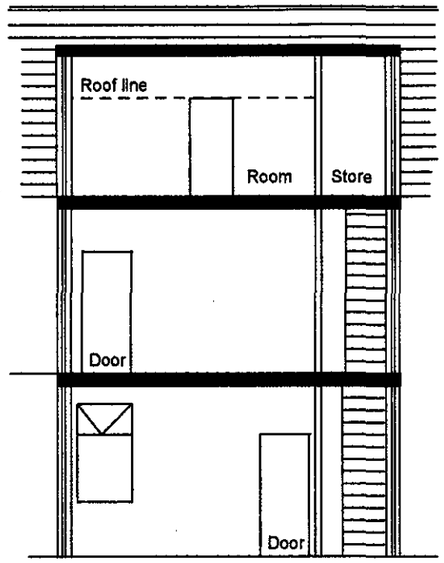
1.8. Ancillaries
A. The unit shall be fully compatible with a standard range of spigot-mounted silencers. Where possible the silencers shall be suitable for direct mounting to the unit.
B. The silencer shall be a rigidly constructed single skinned galvanised sheet steel case lining incorporating internal splitting vanes lined with resin bonded mineral wool and polythene for ease of maintenance.
C. The silencer shall incorporate removable interior splitters via a sealed service panel for ease of inspection & maintenance.
D. The silencer casework shall be provided naturally finished in high quality galvanised steel as standard. Optional powder coated finish as standard Signal Grey to RAL7004. Colour to be in accordance with schedule.
E. In accordance with the schedule the silencers shall be supplied with support feet and channel bases to match the unit casework.
F. The unit shall be available with Anti-vibration mounting feet and flexible duct connection flanges in accordance with the schedule.
G. Ancillaries shall be of the Centrifume (CFD) type as manufactured by VES. Ltd.



South Elevation

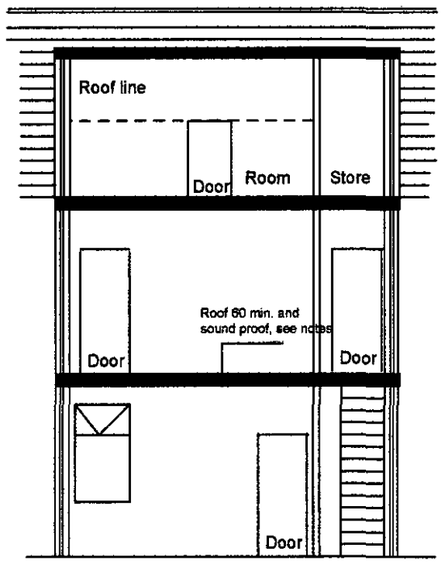


Rear Elevation



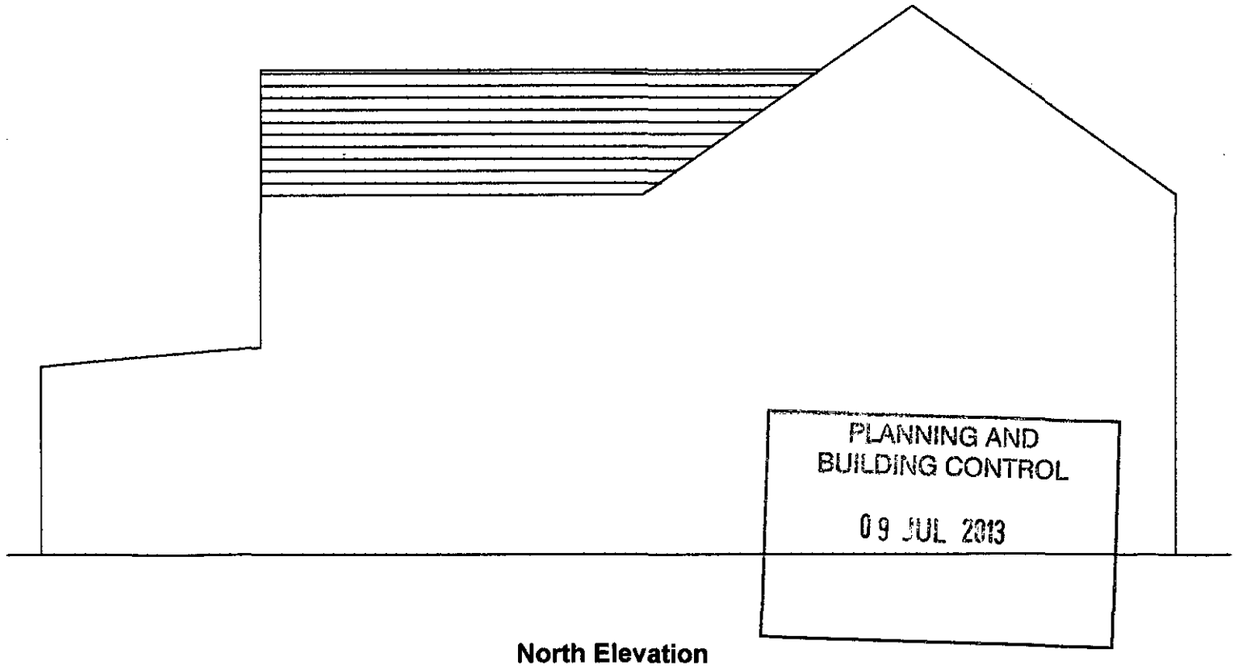
Section X-X

Existing

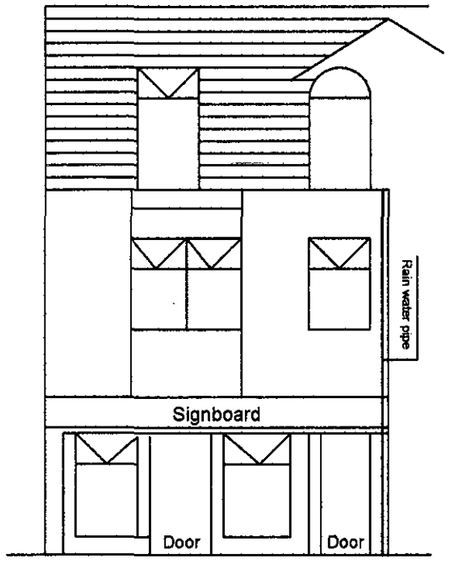


Section X-X

Prop.



North Elevation



Front Elevation

Client	**Mrs. Kausar Nasreen** 184 Church Lane Manchester M9 4LJ		
Title	**Change of Use of Ground Floor from Shop to Takeaway**		
Scale	**1 = 100**	**Drawing No.**	TA-BR-02 20-05-2013