

Notes to Tendering Contractors

Design Responsibility

The Drawings indicate the design intent and it is the Contractors responsibility to adapt, modify and develop the design to provide a final working scheme, which shall be fully compliant with local and statutory regulations in particular with HVCA specifications DW172, 144, TR19, ENMAQ. The tendering contractors should visit site and familiarise themselves with the site constraints and structure. No claim for additional costs shall be accepted, resulting from lack of knowledge of site conditions.

Existing Services

It is intended to re-use the existing supply and extract fans together with the riser ducts. The contractor shall satisfy himself these services are suitable for re-use and to be incorporated in his final design. Fans and ductwork shall be cleaned, access hatches shall be inspected and further hatches shall be added where required to provide adequate facility to clean. Safe access to the risers for maintenance and cleaning shall be provided and the contractor shall engage with the project team to establish and implement an agreed arrangement. Contractor to confirm what the extent of the strip out of existing is and to allow for these works

Structural

The location and selection of plant shall be co-ordinated with other services, the Contractor shall check details of plant support with structural engineer before commencement of works. The structural engineer shall provide detail design of supports where required. Openings through floors and walls shall also be approved.

Acoustics

The scheme should be submitted to the clients acoustic engineer to ensure with any required constraints imposed by the planning authority.

Builders work

The main contractor shall provide all builders work openings through structural walls and floors, to include modifications of windows.

Access and maintenance

Due allowance shall be made within the design by the client for special access required for cleaning and maintenance. The Contractor shall advise where access panels and locations are required for servicing and cleaning and shall agree with the Clients project manager access panel locations, locations where equipment or seating is required to be re-movable for safe access. Particular care is required for selecting access panels for exhaust riser ducts. Carefully consider location of equipment for access ensuring best possible safe access can be provided.

Adequate access panels are required within the ductwork and plant to facilitate cleaning of the internal surfaces of ductwork. It is recommended that the locations are fully reviewed and checked to ensure panels are large enough, suitable in quantity and size to allow safe and full cleaning of the internal surfaces of the ductwork and plant.

Fire rated ductwork & fire strategy

Kitchen exhaust ductwork shall be suitably fire rated from the Kitchen wall to outside. The specification shall be fully compliant agreed and approved with building control. The installation shall be certificated on completion. The kitchen supply and extract fans shall be interlocked with the Cookline operation and shall shut down the cookline operation in the event of fan failure.

The gas supply shall be provided with a gas prove system (by others) and shall be disabled in the event of fan failure.

The extract canopy shall be provided with a suitable, regulation compliant, fire suppression system, designed by a specialist supplier and approved by the building control. In the event of fire or activation of the suppression system all equipment shall shut down.

A local CO2 sensor within the Kitchen shall be installed to shut off the gas supply in the event of activation.

An emergency "plant shut down" button should be provided locally within the kitchen.

The contractor shall confirm with the Project Manager the building fire strategy and shall check and amend the design accordingly.

A central control panel shall be provided to facilitate the above.

Ductwork

All ductwork shall be constructed and installed in accordance with HVCA specifications DW172 for Kitchen extract duct and DW144 for all other ductwork. Ductwork shall be complete with access panels for maintenance and cleaning, fire dampers, smoke dampers or volume control dampers as required to protect escape routes and compartments, where agreed with the Project Manager and building control. Note the kitchen extract duct should contain no fire dampers or smoke dampers. Volume control dampers shall be installed to facilitate balancing.

NOTE drawing text

AD - Denotes Access Door

FD denotes Fire damper

VCD denotes volume control damper

Thermal insulation

Fresh air inlet ductwork and supply ductwork shall be thermally insulated with "Ductwrap" or slab section, foil faced, and shall have joints taped, all secured with lace wiring. Ic bands shall be applied upon completion. Insulation thickness to be as building regulations.

Odour Control Equipment

The equipment shall consist of Electrostatic Precipitator, with integral oil and grease collector. ESP shall work to 98% efficiency through a single pass This shall be piped back into the canopy drain. A UV filter or site safe carbon filters shall be provided suitably sized for airflow and dwell time. Do not use UV filtration where adequate dwell time can not be achieved.

Air Conditioning equipment

Equipment shall be as selected from Daikin range or Mitsubishi Electric or equal and approved. Units shall be inverter driven heat pumps suitable for the respective pipe runs. Units shall be complete with individual controller for offices and single rooms. Dining area units shall be connected to a single controller. Units shall be interlocked with the fire alarm to shut down on activation, additionally interlocked with a test reset out switch to disable when the building not occupied. The installers shall be part of the manufacturers partner schemes i.e. Daikin D1 installer or Mitsubishi Electric Business Partner.

All pipework shall be copper refrigerant grade pipe work and installed on cable tray or proprietary hangers indoors and cable tray outdoors. Any external tray shall be over trayed to protect from vandalism and UV rays.

Tendering Contractor to provide option costs for Cooling to the Kitchen and back of house areas.

Extract fan

The extract fan shall be rated for the extract canopy and suitable temperature, the fan shall be provided with inverter control unless supplied with EC motor. The fan shall be supplied with acoustic jacket and matching attenuators. Where located externally the assembly shall be fully weathertproof.

Air handling unit / Air handling equipment

The air handling unit shall be supplied complete with supply air fan either "olag" type or centrifugal fan, disposable panel pre-filters "vse formation" and electric air heater battery. The air handling unit shall where possible be contained in a double skin panelled unit, with access doors positioned to suit the location arrangement. The fan shall be mounted on anti vibration mounts. The fan motor shall be EC rated or supplied with inverter control - separate components are acceptable.

Where located externally the assembly shall be fully weathertproof.

Controls

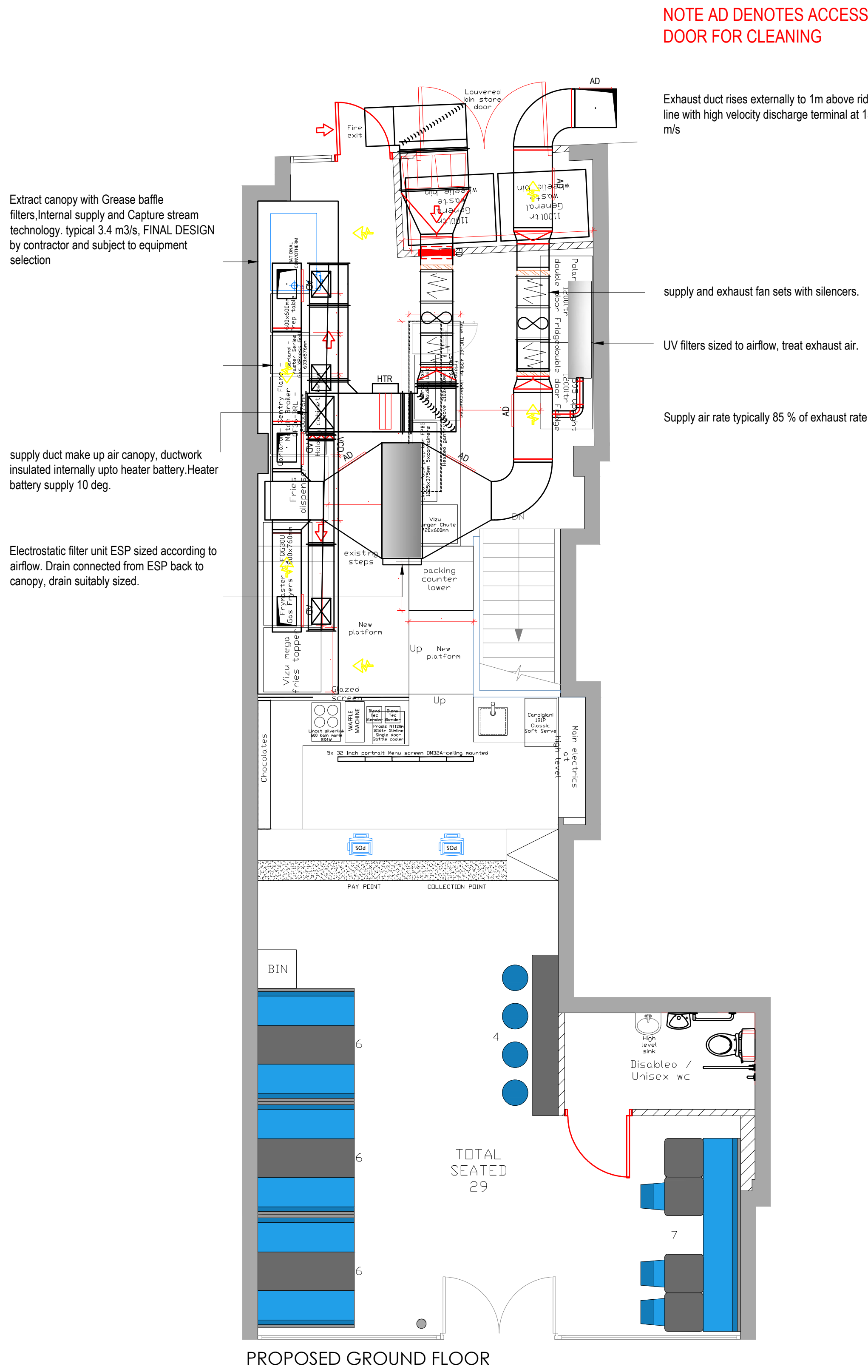
A control panel shall be supplied with switching, run & fault indication for the supply and extract fans. Output voltage control shall be available to alter the fan speed where inverters not provided or required. The control panel shall provide interlocks of all safety equipment to shut down the cookline and or equipment on alarm condition.

A central on / off system switch shall be provided for the user to provide simple operation, the panel shall have fault indication and alarm indication, suitably labelled.

It is envisaged that the supply shu will be complete with integral controls, however it is acceptable to incorporate these within the main panel. All loose controls shall be housed with the control panel.

The panel shall be complete with door interlocking isolator.

DEANSGATE



PROPOSED GROUND FLOOR

NOTE AD DENOTES ACCESS DOOR FOR CLEANING

Exhaust duct rises externally to 1m above ridge line with high velocity discharge terminal at 15 m/s

supply and exhaust fan sets with silencers.

UV filters sized to airflow, treat exhaust air.

Supply air rate typically 85 % of exhaust rate

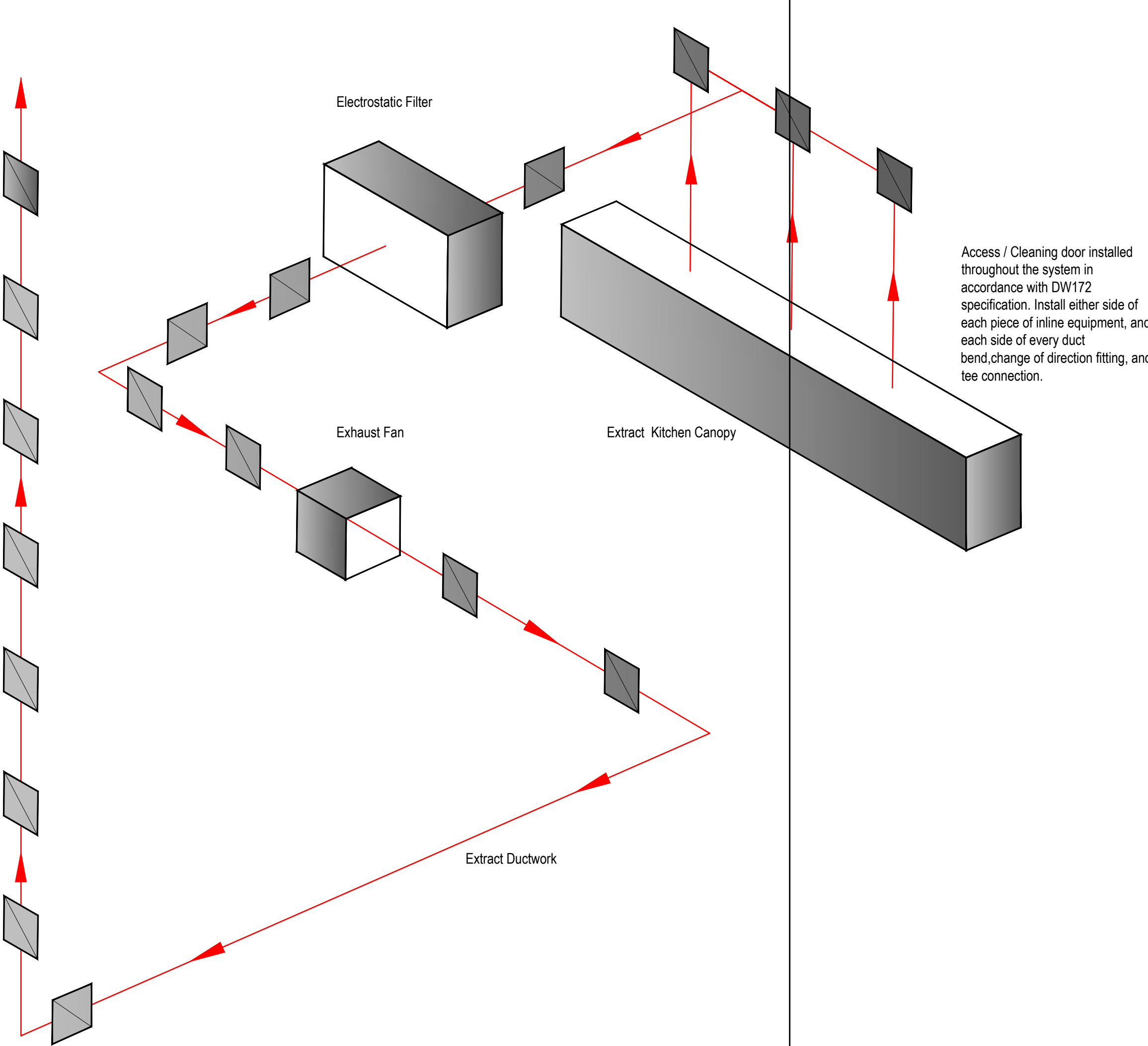
Electrostatic filter unit ESP sized according to airflow. Drain connected from ESP back to canopy, drain suitably sized.

Extract riser secured to building with steel cantilever arms, min 3m centres or as detailed by structural engineer.

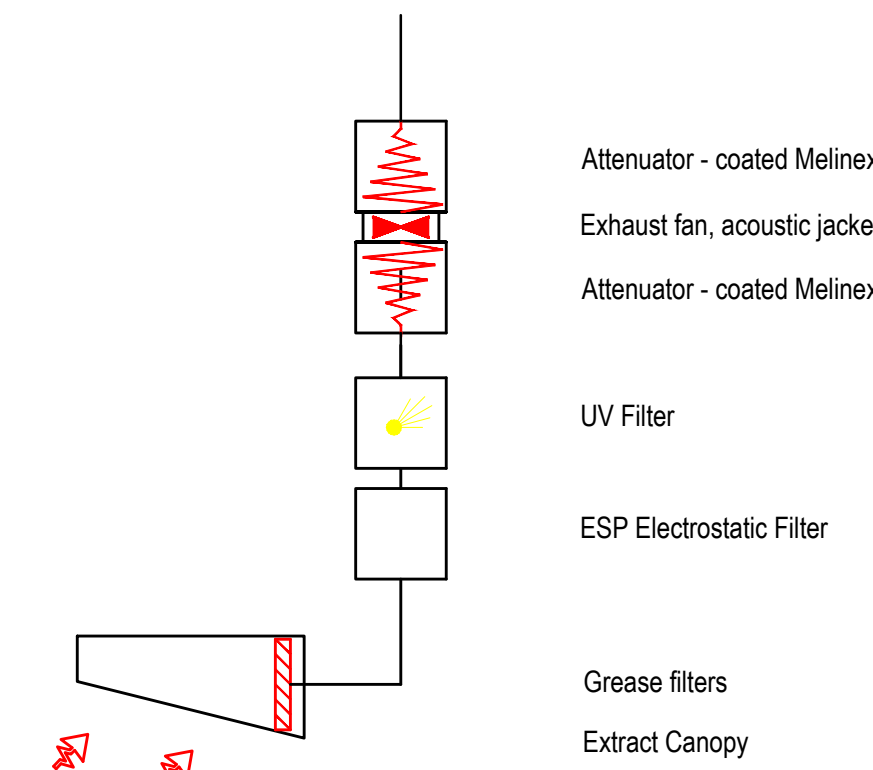
Extract duct riser extends upto to ridge line and min 1m above, air discharges with a high velocity terminal min 15 m/s

Existing shutter box removed if required new opening to be made good around duct. final 75 x75 x 6mm metal flashing plate fitted to duct and sealed back to wall.

PROPOSED REAR ELEVATION



Access / Cleaning door Diagram



TYPICAL EXHAUST SCHEMATIC

NOTES & REVISIONS

C	26-10-22	Cleaning Access doors details added
B	08-10-19	Updated to latest layout
A	09-07-19	LL Comments
Rev.	Date.	Amendment

McVeigh
TECHNICAL SOLUTIONS LTD

Unit 9, Markfield Industrial Estate
Hill Lane Close, Markfield, Leicestershire, LE67 9PY
Tel: - 01530 245 777 Fax: - 01530 245 888
Email: - info@mcveigh-aircon.co.uk

Proposed Extract Ventilation Services
for Players Restaurant
75 Deansgate
Manchester

Drawn By: - SP	Checked By: -
Scale: - 1:50 @ A0	Date: - 03-07-19
Drawing No: - E26119-1	Rev: - C

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