

UNIVENT BESPOKE SOLUTIONS

Specifications	Client
Kitchen Ventilation system	Mr Rajvinder 2 Milton Street, Gravesend DA11 2RE

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1 Specification

Name: Rajvinder Singh

Address: 2 Milton Street, Gravesend Kent

Post Code: DA11 2RE.

Our ref: RJVND2MSGVND

Date: JUNE 2026

Dear Mr Rajvinder

Re: Proposed Kitchen Ventilation System For the above Site

The design specifications for your Kitchen ventilation system will be designed for the above address will be in accordance with DW144 & DW172 specifications.

The Kitchen Ventilation System

The Kitchen Extraction Canopy/Hood and internal installations

The canopy will be constructed to be mounted overhead and to be secured to wall and is manufactured to with 304 grade stainless steel brushed finish.

The size is 3000mm Wide x 1200mm Deep and 600mm back, 300mm front.

Which will incorporate a filter housing with five baffle filters (H 500mm x W 500mm x 50mm deep) (nominal size) actual size will differ (-3mm to 5mm) for easy fitting.

Stainless steel splash back will be fitted under the canopy across the full width of the canopy.

Air Intake/Make up supply Air can be provided with rectangular ducted header suspended on the ceiling with supply diffusers or supply duct sited internally above canopy with rectangular double deflection supply diffusers.

We recommend a gas interlock system be incorporated fitted for safety.

2 System Ductwork

All system ductworks will be manufactured from galvanised steel of lock formed and flange construction in accordance with DW144 and DW172 specifications.

The extraction duct work intake will be above canopy hood for better air balancing, and two air intakes will be suitably incorporated to evenly distribute across the extraction hood.

Horizontal Duct Fan inlet will be based on 500mm square transfers and ancillaries may vary and equivalent sizes may be used to overcome any obstacle maintaining volume flow. Cleaning access doors where possible at around 1.5m intervals. Vertical stack will be based on 450mm square starting around 1m from the flat roof. Secured with cantilever brackets and anti-vibration mounts cleaning access door at 2m intervals where possible.

Duct termination 1m above the eaves and duct reducer to increase discharge velocity of above 10-14 m/s.

3 Fan details

Extraction fan

Located under the flat roof with bespoke built brackets and anti-vibration pads will be added, capable of managing the design volume flow of 2.2 m³/s to 1.85 m³/s at a system resistance of 250pa to 400pa, centrifugal discharge with losses accounted for design efficiency.

expected efflux velocity is 10 to 14m/s at Jet Cowl discharge point plumes would be dispersed much higher the discharge point.

speed controllable for dynamic air management.

Supply fan

Located above on flat roof with bespoke built platform and anti-vibration pads will be capable of managing the design volume flow of 0.85 m³/s to 0.6m³/s at a system resistance of 100pa. to 200pa speed controllable for dynamic air management.

Noise Control

To mitigate potential noise levels, the system will comprise sound attenuation with 2D podded silencer will be installed after extraction the fan a typical reduction of 26dba can achieved.

1D podded silencer will be installed after the supply fan a typical reduction of 13dba can achieved.

Odour control Filtration Unit

A 2 bank 500mm x 1000mm x 600mm filtration unit will incorporate 2x 500mm x 500mm fine Particulate filters and followed by 2x 500mm x 500mm carbon filters, See attached data sheet.

Plant selection

Fan

Extract Air

Flaktwoods (PowerBox3 67-500-1) 500mm 1ph 230v input 3ph with inverter speed controller

Insulated Fan or equivalent (44dba Sound level 3m) PEB500140.

Fresh Air

Flaktwoods (PowerBox3 50-355-140) PB355140

355mm single phase 230v with speed controller

Insulated fan or equivalent (32dba Sound level 3m)

Other parts

See attached data sheets.

Cleaning and maintenance

The canopy, splashback and baffle filters should be cleaned regularly.

On daily basis.

We recommend that kitchen extractor system routinely maintained and a full deep clean after 4 to 6 months be conducted depending on your usage.

And continue to do so with a professional cleaning company to maintain maximum.

Efficiency of your kitchen extraction system.

We have attached additional data sheets for your information relating to the system detailed above and the enclosed is sufficient for your requirements.

Should you require any further assistance please do not hesitate to contact us.

Yours sincerely

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