

Keen Forks Ventilation Specification

Specifications

Kitchen

Ventilation system

Date: Nov 2022

Updated Nov 2022

Client

Mr. Itayi Mandhiza

Keen Fork Ltd

148, Parrock Street

Gravesend Kent DA12 1EY

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1 Specification

Name: Mr. Itayi Mandhiza

Address: Keen Fork Ltd

148, Parrock Street, Gravesend

Post Code: DA12 1EY

Our ref: KN/FK/LTD

Date: Nov 2023

Dear Mr. Mandhiza

Re: Proposed Kitchen Ventilation System For the above Site

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

The Kitchen Ventilation System Design

The Kitchen Extraction Canopy/Hood and internal installations

The canopy constructed, will be mounted overhead with 2m Clearance, shall be secured to the wall with anchor bolts.

And manufactured to DW172 specifications, with 304 /430 grade stainless steel brushed finish.

The size is 1200mm Wide x 1000mm Deep and 500mm Back, 300mm front.

Which will incorporate a filter housing with baffled filters (H450mm x W 450mm x 50mm deep) (nominal size) actual size will differ (-2mm 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 would be woods espada range tube fan with pre filter a supply air diffuser, suitably located, and spaced to supply kitchen area.

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

2 System Ductwork

All System Ductwork will be manufactured from galvanized steel of lock formed and mezz flange construction also any spiral duct in accordance with DW144 and DW172 specifications.

The air intakes will be suitably incorporated to evenly distribute across the extraction hood.

Horizontal system duct run will be based on 300mm 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.

Odour Control and noise abatement will be incorporated to mitigate any environmental impact to the surroundings. Vertical discharge 250mm Exhaust Duct with jet cowl at rear of the building, Terminated 1m above eaves, with an efflux velocity between 14 to 15m/s. With speed control.

(See attached data sheets.)

3 Fan details

Plant selection Fans

Extraction fan

Flackt-Woods Powerbox (50-355-1)

355mm single phase 230v with speed controller (or equivalent).

Located at the back wall, with bespoke built platform and anti-vibration pads will be capable of managing the design volume flow of 0.77m³ to 0.6m³/s to mid-range at a system resistance of 200pa to 300pa and sound level of 32db(A) (4m) power consumption

0.6KWh/day.

Supply fan

Flackt-Woods Espada 250mm axial flow single phase 230v with speed controller (or equivalent

Located at the rear of the building wall and anti-vibration pads will be capable of managing the design volume flow up-to 0.22 to 0.191 m³/s 100pa to 150pa and sound level of 32dba power Consumption. 0.33KWh/day. (Please see updated specs attached for power box and fan)

Odour control Filtration Unit

600mm x 600mm x 400mm filtration unit will incorporate 1x 600mm x 600mm fine particulate filters, followed by

Purified Air SitesafePA240824

2 x 594mm x 594mm x 196 Carbon block filters. In a (600 x 600 x 400 mm) enclosure See attached data sheet.

Noise Abatement

100DIA 1200 Length 50mm Ins Silencer - Attenuator

To mitigate potential noise levels, the system will comprise sound attenuation silencer and will be installed to system duct work, a typical reduction of 11dba (63hz). Fitted with flexible connectors.

Other parts (See attached data sheets.)

Cleaning and maintenance

The Canopy Splash back and baffle filters should be cleaned regularly daily. 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 continued

Design efficiency of your kitchen extraction system, also to comply with equipment warranty terms.

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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