

Reference: 111 High Cheltenham

Please find as attached drawing to show the proposed kitchen ventilation scheme for the property 111 High Street, Cheltenham.

Included are drawings DODO - 02, to accompany this drawing are files with full information on associated accessories. These to include details on fans, silencers for extract and supply fan, baffle filters as primary odour control and ozone generating unit as secondary odour control.

The system comprises aspects as detailed below to combat odour and sound nuisances.

Ventilation canopy.

The canopies are constructed from 304 stainless steel and sized in accordance with DW 172 specifications with light fittings to provide a luminance level of not less than 500 Lux upon the cooking equipment. The canopies are complete with an integral full length filter housing containing stainless steel baffle type filters.

Odour control

First stage filtration.

The grease-laden air is forced through the baffles causing the grease particles to be thrown to the sides by centrifugal action. The filters smooth surface allows the grease to run by gravity down to the base of the filter and through small holes into a formed trough and finally into grease collection drawers. Their stainless steel construction allows the filters to be soaked or cleaned without corrosion on a weakly basis.

Second stage filtration.

The UVO1000 unit works through oxidization using ozone and activated oxygen ions in accordance with DEFRA 2005 Guidance. The system works by injecting ozone into the kitchen exhaust duct where it reacts with odours which are oxidized via chemical reaction. The resultant reaction produces a mix of carbon dioxide and water vapour whilst the ozone itself is consumed and converted back into oxygen.

These levels and types of filtration were decided upon following EMAQ guidelines with an assessment being undertaken by Purified Air. The system would follow these guidelines as directed.



Ductwork and mechanical plant

The ductwork is constructed from galvanised mild steel to be formed, folded, stiffened and sealed to current DW144 / DW172 specifications. The ductwork would be installed with adequate access doors all as to current TR19 standards to allow for periodic cleaning by a specialist contractor.

The external duct is powder coated along with all visible fixings to match the existing external as closely as possible. This all to be mounted on anti-vibration type mountings as not to transfer to fabric of building.

System sound level

Silencers have been installed to either side of the kitchen extract and supply fans to reach required dBA levels. An independent sound assessment was undertaken prior to commencement of works as to correctly size the silencers. The silencers as installed were manufactured following these parameters.

System maintenance

The ventilation system will require ongoing maintenance, this will include cleaning of filters and grease trays within the stainless steel hoods. There are access doors for cleaning of duct bi annually, a contract will be put into place by Concept on behalf of Dodo to ensure this is carried out by a certified contractor.

The UV system will be put into a maintenance scheme by Purifed Air to ensure unit works to full capacity. This will initially be undertaken bi annually although this will be reviewed after the first 2 cleans.