

Specification & EMAQ Report

Project: Pret – Burgess Hill

Prepared for: John Rush

Prepared by: Dan Franklyn

Date: 27.04.2025

Contact details:

M: 0797751450

T: 01708577951

Email: dan.franklyn@purifiedair.co.uk

Interpretation of Requirements

Following our conversation I am pleased to provide an equipment selection for an odour control solution.

As with any project we get involved in we always recommend to our clients that they should closely follow the EMAQ guide for guidance on odour control equipment selection.

This ensures that what they propose will be in line with local authority's requirements and if the system is maintained correctly they will not exhaust nuisance odours leading to complaints from nearby residents.

With this in mind I carried out a risk assessment as detailed in Annex C of the EMAQ Guide.

Taking into consideration the level of discharge, proximity of receptors, size of kitchen and cooking type your project requires a high level of odour control to comply.

We have scored as below and as taken from Annex C: Risk Assessment for Odour;

Dispersion = 5

Proximity of receptors = 10

Size of kitchen = 3

Cooking type 1

Total score = 19

The type of odour abatement system that complies is as below, taken directly from the DEFRA Guide and must be to a very high level of control;

Odour arrestment plant performance

Low odour control may include:

Fine filtration or ESP followed by carbon filtration (carbon filters rated with a 0.1 second residence time)

Fine filtration followed by counteractant/neutralizing system to achieve the same level of control as 1

Impact Risk	Odour Control Requirement	Significance Score*
Low to Medium	Low level odour control	Less than 20
High	High level odour control	20 to 35
Very high	Very high level odour control	more than 35

* based on the sum of contributions from dispersion, proximity of receptors, size of kitchen and cooking type:

Criteria	Score	Score	Details
Dispersion	Very poor	20	Low level discharge, discharge into courtyard or restriction on stack.
	Poor	15	Not low level but below eaves, or discharge at below 10 m/s.
	Moderate	10	Discharging 1m above eaves at 10 -15 m/s.
	Good	5	Discharging 1m above ridge at 15 m/s.
Proximity of receptors	Close	10	Closest sensitive receptor less than 20m from kitchen discharge.
	Medium	5	Closest sensitive receptor between 20 and 100m from kitchen discharge.
	Far	1	Closest sensitive receptor more than 100m from kitchen discharge.
Size of kitchen	Large	5	More than 100 covers or large sized take away.
	Medium	3	Between 30 and 100 covers or medium sized take away.
	Small	1	Less than 30 covers or small take away.
Cooking type (odour and grease loading)	Very high	10	Pub (high level of fried food), fried chicken, burgers or fish & chips.
	High	7	Kebab, Vietnamese, Thai or Indian.
	Medium	4	Cantonese, Japanese or Chinese.
	Low	1	Most pubs, Italian, French, Pizza or steakhouse.

The System

Once the airstream in the exhaust duct has had the majority of the particulates removed by one of our ESP units the gaseous phase or malodour can then be treated by the ON 100. The vapour from a specially blended neutralising agent, ELIMINODOR®, is mixed with ambient air drawn into the ON100 and ionised to a negative potential of 15,000 volts.

This ionised vapour then passes along a nonconductive tube to be discharged into the centre of the duct via a venturi spigot, the metal ducting is earthed through the same high tension circuit which makes the contaminant at an opposite potential to the negatively charged ELIMINODOR® vapour.

Specification – Based on an air volume no greater than 4m³/second -If the volume is less we can change the below to suit, also based on gas cooking

TECHNICAL SPECIFICATION

ON 100

Max Air Volume	up to 4.16m ³ /sec
Dimensions	W400mm H500mm D250mm
Weight	12.25KG (Approx)
Power	40W



